> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

STATEMENT OF THE CASE

A. The Patent In Suit

Petitioner Ron Nystrom, a carpenter by trade, invented a uniquely shaped board for use in constructing exterior flooring surfaces (such as outdoor decks, porches, docks, etc.) which has a slightly curved top surface that sheds water, and a concave bottom surface that allows multiple boards to stack easily. App. at 75A. Nystrom applied for and was duly granted U.S. Patent No. 5,474,831 ("the '831 patent") for his invention on December 12, 1995. Claim 1 of the '831 patent reads as follows:

> 1. A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite side edges, said top surface being manufactured to have a slightly rounded or curved configuration from a longitudinal center line thereof downwardly toward each side edge, thereby defining a convex top surface which sheds water and at the same time is comfortable to walk on, and said bottom surface having a concave configuration for nesting engagement with the top surface of another board so that a plurality of the boards may be stacked one on top of the other with the stability of conventional boards having flat top and bottom surfaces.

App. at 80A.

Respondents Trex Company, Inc. and Trex Company, LLC (collectively, "Trex") manufacture and sell a decking board made from a composite of wood particles and plastic. These materials are mixed, heated, and

extruded to produce a composite material board with a curved top and bottom. App. at 75A. Nystrom sued Trex for infringement of the '831 patent in December, 2001, invoking the jurisdiction of the district court under 28 U.S.C. §§ 1331 and 1338(a). The case hinges on the proper construction of the term "board," which appears in each of the claims asserted by Nystrom against Trex.

B. The District Court P oceedings

Pursuant to cross-motions submitted by the parties, the district court held a *Markman* hearing wherein the parties presented an array of evidence concerning the proper construction of the disputed claim term "board."[1] The district court's initial task was to determine the ordinary meaning of the term "board" to one skilled in the art to which the patent was directed (i.e., exterior construction materials). Nystrom argued that the ordinary meaning of "board" was not limited to wood cut from a log, but that it also covered a variety of other rigid materials suitable for building.

To prove that the ordinary meaning of board was not limited to wood boards cut from a log, Nystrom showed the district court judge at the *Markman* hearing examples of a variety of boards from the exterior construction industry. The boards were made from various materials other than wood and using a variety of manufacturing techniques. For example, Nystrom displayed wood/chemical boards created using vacuum and pressure methods, wood composite boards created using extrusion methods, and plastic and plastic/fiberglass boards created using plastics technologies. Nystrom also provided proof that Trex itself used the term "board" to describe the wood/composite product that is the subject of Nystrom's infringement claim. In particular, Nystrom submitted Trex's federal

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[1] The district court also heard argument on the disputed claim terms "manufactured to have" and "convex top surface." App. at 74A.

trademark registrations for its wood/composite product which defined Trex's product as "boards." Nystrom also presented the district court with Trex's internal documents in which Trex concluded, upon review of the '831 patent, that Trex's wood/composite product was a "board" as that term was used in the '831 patent. Moreover, Trex referred to its product as a "board" three separate times in the claim construction brief it submitted to the district court. Thus, there was no dispute in the district court that the ordinary meaning of "board" included rigid building materials not limited to wood cut from a log.

In accordance with the evidence, the district court made implicit and explicit factual findings that the ordinary and customary meaning of "board" was not limited to wood cut from a log. Indeed, in its claim construction opinion and order (and the other orders that followed), the district court identified Trex's composite decking product as a "board," and used the ordinary meaning of "board" not limited to wood as the starting point for its claim construction analysis. App. at 58A, 69A, 75A, 81A.

The district court then turned to the intrinsic evidence (the claims, specification and prosecution history of the '831 patent) to see if Nystrom had limited the scope of the term "board" and thereby departed from the term's ordinary meaning. Nystrom argued that he had placed no limits on the full range of the ordinary meaning of "board," pointing out that the claim language of the '831 patent supported the ordinary meaning. Specifically, the term "board" was used in some claims while the term "wood board" was expressly used in others, providing a clear indication of Nystrom's intent not to limit all claims to wood boards. The district court held from its review of the claim language that:

> As an initial matter, the court notes that there is no special description of the material of which the

> board is composed. Rather, the claim details the shape of the board.

App. at 81A. The district court found, however, that "when viewed in light of the specification, it is discovered that the inventor has limited the scope of the term board to those made of wood." *Id.* The district court also interpreted the file history as limiting the term "board," stating that "it appears that the Plaintiff made a number of disclosures which serve to further limit the scope of the term." App. At 82A. The judge thus reached the conclusion that the term "board" should be limited beyond its ordinary meaning for the purposes of the '831 patent to "wood cut from a log."[2] *See* App. at 80A-83A.

Given the district court's claim construction rulings, Nystrom conceded that he could not prove his infringement case against Trex, and requested that the district court enter a judgment of non-infringement and dismiss Trex's counterclaims without prejudice, so that the matter could be appealed.[3] Trex then moved for summary judgment of non-infringement and partial summary judgment of invalidity. The district court entered a judgment of non-infringement and partial invalidity against Nystrom, and stayed Trex's counterclaims pending appeal.

C. The Appellate Proceedings

Nystrom appealed the judgment. The Federal Circuit initially dismissed the appeal for lack of finality in light of the stayed counterclaims. The district court then entered, *nunc pro tunc*, an amended final judgment

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[2] Based in part on its holding that Nystrom limited the claim term "board" to "wood cut from a log," the district court also held that the disputed claim term "manufactured to have" was limited to woodworking techniques, such as cutting, milling, and the like.

[3] The district court's claim construction opinion included prosecution history rulings that estopped Nystrom from proceeding with his claim of infringement under the doctrine of equivalents.

of non-infringement and dismissed without prejudice Trex's counterclaims. The Federal Circuit reinstated the appeal.

After briefing and oral argument, a panel of the Federal Circuit issued an opinion on June 28, 2004 (the "Initial Opinion") in which the panel agreed with the district court's finding regarding the ordinary meaning of "board," but disagreed with its ultimate claim construction, holding that:

> Giving the term the *full range of its ordinary and customary meaning*, consistent with the written description and prosecution history, we construe the word "board" as used in claim 1 and its dependent claims, to mean an elongated, flat piece of wood or other rigid material.

App. at 43A (emphasis supplied). In addition to finding support in the claims themselves (*i.e.*, the use of the term "board" in claim 1 and "wood board" in claim 16), the Federal Circuit relied for the first time in the case on a dictionary definition that confirmed that the ordinary meaning of "board" was not limited to wood and instead covered "wood or similarly rigid material." App. at 40A. The panel also found support in the specification, stating that "[t]he fact that the written description expressly recognizes that the decking board of the invention is 'a superior product when cut from a log' implicitly recognizes that the decking board of the invention may be made of other rigid materials as well." App. at 41A (emphasis in original). The panel expressly held that there was no disavowel or disclaimer contained in the file history warranting a departure from the ordinary meaning of "board." Accordingly, in the Initial Opinion, the panel construed "board" to encompass the full range of its ordinary meaning reversed the district court's grant of summary judgment and ordered the case remanded for trial. The mandate was expected to issue in due course.

However, before the mandate issued, the Federal Circuit granted a petition for *en banc* rehearing in the unrelated case of *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Five days later, Trex filed a petition in the instant case for panel rehearing and rehearing *en banc*. The panel withheld ruling on Trex's petition for over a year until the *en banc* opinion in *Phillips* was issued.

Shortly after the *Phillips* decision issued, the panel granted Trex's petition for rehearing "for the limited purpose of addressing the effects of *Phillips*." App. at 91A. Simultaneously with that Order, and without further briefing or hearing, the original panel withdrew its Initial Opinion, and entered a new opinion based solely on the new claim construction law it created in *Phillips*.

In the new opinion, the panel gave no deference to the district court's finding regarding the ordinary meaning of "board." The panel also ignored its earlier finding in the Initial Opinion that the ordinary meaning of "board" encompassed not only wood, but other rigid materials suitable for building. Based entirely on *Phillips*, the panel now held that the ordinary meaning of "board" was strictly limited to "wood cut from a log." The Federal Circuit arrived at that construction despite its express finding that "[t]he claims at issue do not include any language describing the 'board' as cut from a log or necessarily being made of wood." App. at 11A. The panel explained its departure from the ordinary meaning adopted by the district court (and by the panel in its Initial Opinion) as follows:

> Nystrom, however, seeks to broaden the term "board" to encompass relatively obscure definitions that are not supported by the written description or prosecution history. Broadening of the ordinary meaning of a term in the absence of support in the intrinsic record indicating that such a broad

> meaning was intended violates the principles articulated in Phillips.

App. at 16A. Of course, *Phillips* changed nothing in the claims, specification or file history of the '831 patent, nor had the Federal Circuit been presented with any new evidence as to what a person skilled in the art would understand the term "board" to mean. Yet, when reviewed for the "limited purpose" of applying *Phillips*, the full range of the ordinary and customary meaning of "board" was somehow no longer supported by the '831 patent, even though the same panel had previously held that there was explicit and implicit support for the full definition. The panel now stated that a definition of "board" that included rigid materials other than wood cut from a log was "obscure" and, in contrast to the district court, started its analysis with a narrow ordinary meaning of "board" limited to wood cut from a log. As a result, the panel limited all claims in the '831 patent to wood cut from a log even though it found that "there was no clear disavowel of claim scope." App. at 16A. The panel erroneously stated that both parties "acknowledge" that the ordinary meaning of board is "a piece of sawn lumber," even though the record reflects that sawn lumber is only one type of board and the evidence establishes a broader ordinary meaning of "board" not limited to wood. *See* App. at 14A, 16A.

In view of the new "ordinary meaning" of board arbitrarily arrived at by the panel in the new opinion, the panel affirmed the district court's grant of summary judgment of non-infringement, reversed the judgment of partial invalidity, and remanded the case for further proceedings consistent with its opinion. Nystrom timely filed a petition for panel rehearing and rehearing *en banc*, which was denied on November 1, 2005. Nystrom then filed a motion to stay the issuance of the Federal Circuit's mandate, which was also denied. This Petition timely followed.

REASONS FOR GRANTING THE PETITION

A. Introduction

Claim construction is the process used by courts to interpret patent claim language and thereby determine the scope of patent protection. *Markman v. Westview Instr., Inc.*, 52 F.3d 967, 970 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). Claim construction is conducted in virtually every patent infringement suit, and almost always determines the outcome of the case. *Id.* at 989 (Mayer, J. concurring) ("[T]o decide what the claims mean is nearly always to decide the case").

For more than a decade, the Federal Circuit has improperly assumed the role of both the trial court and the appellate court in determining the proper construction of a patent claim. By maintaining that claim construction "is a matter of law exclusively for the court," reviewed "*de novo* on appeal including any allegedly fact-based questions relating to claim construction," the Federal Circuit has effectively usurped the fact-finding role of the district court. *Markman*, 52 F.3d at 970-71; *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998). The Federal Circuit, however, is ill-suited to act as both the fact finder and the ultimate arbiter of patent scope, as evidenced by the panel's two polar decisions in this case and by reversal rates approaching 40% in claim construction cases. *Cybor*, 138 F.3d at 1476 & n.4 (Rader, J., dissenting in part). The situation has led to confusion in the district courts and throughout the patent bar, creating general uncertainty as to the scope and value of patents and defeating one of the express Congressional intents behind the formation of the Federal Circuit. H.R. Rep. No. 312, 97th Cong., 1st Sess. at 22-23 (1981) ("A single court of appeals for patent cases will promote certainty where it is lacking to a significant degree").

Subsequent to *Markman* and *Cybor*, the Federal Circuit has refused to acknowledge the fact-finding role of the district court in claim construction, and has instead

experimented over the years with numerous claim construction methodologies aimed at reducing the uncertainty inherent under a system where no discretion is given to the factual determinations of the trial judge. None of the Federal Circuit's methods has worked. *See Phillips*, 415 F.3d at 1330 (Mayer, J. joined by Newman, J., dissenting) ("[W]e continue to struggle under this irrational and reckless regime, trying every alternative – dictionaries first, dictionaries second, never dictionaries, etc., etc., etc."). In its most recent attempt, the Federal Circuit declared in *Phillips*[4] a claim construction method which relies chiefly on the specification of the patent to determine the ordinary and customary meaning of a claim term to one skilled in the art of the patented invention. The effect of this method is to limit the scope of a broadly-claimed invention to the narrow confines of the patentee's preferred embodiment, all without benefit of the fact-finding tools needed to determine what a person skilled in the art of the patent would think the claim terms mean. By extracting the "legal" finding of ordinary meaning directly from the specification (as was done in the instant case) limitations from the inventor's description of the preferred embodiment of the invention inevitably get read into broader claim language – a practice long prohibited by this Court.[5] The result is no less than a wholesale devaluation of United States patents. *See Cont'l Paper Bag Co.*, 210 U.S. at 418 ("An inventor must describe what he conceives to be the best

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[4] 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*).

[5] *See, e.g., Merrill v. Yeomans*, 94 U.S. 568, 570 (1876) (The "distinct and formal claim" is "of primary importance, in the effort to ascertain precisely what it is that is patented"); *Cont'l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 419 (1908) ("The invention, of course, must be described and the mode of putting it to practical use, but the claims measure the invention"); *Graver v. Linde*, 336 U.S. 271, 277 (1949) ("[T]he claim measures the grant to the patentee"); *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 339 (1961) ("[T]he claims made in the patent are the sole measure of the grant").

mode, but he is not confined to that. If this were so, most patents would be of little worth").

Individual inventors with low-tech patents, such as Mr. Nystrom, are particularly hard-hit by the Federal Circuit's current claim construction law. For instance, the claims of the '831 patent use plain, non-technical language to define Mr. Nystrom's invention. The claims do not limit the invention to any particular material, as the district court expressly found; rather they broadly claim "a board for use in constructing a flooring surface for exterior use." App. at 80A. Also, the specification of the '831 patent, as required by 35 U.S.C. § 112, describes Mr. Nystrom's preferred embodiment of his invention (*i.e.*, a curved board made from wood cut from a log). However, that embodiment, and the statutorily required description of how best to make it, does not define the full scope of the invention under the law of this Court – that is the purpose of the claims.

However, by restricting the scope of the invention to the particular "context" of the specification, the *Phillips* method of claim construction obscures the difference between the disclosure requirements of Section 112 and the full scope of patent protection as defined by the claims. As this Court aptly put it over a century ago, "if we once begin to include elements not mentioned in the claim in order to limit such claim . . . we should never know where to stop." *McCarty v. Lehigh Valley R.R. Co.*, 160 U.S. 110, 116 (1895); *see also Graver v. Linde*, 336 U.S. 271, 277 (1949) ("It would accomplish little to require that the claims be separately written if they are not to be separately read"). The two inapposite opinions issued by the Federal Circuit in this case show in stark comparison that at least one panel of the Federal Circuit did not know where to stop. After reading the preferred material (wood) into the claims, the panel then decided to also read-in the preferred manufacturing technique (woodworking), even though the claimed language is directed only to the shape of a board and not to a material

or manufacturing technique. Thus, the conflicting decisions in this case instruct the district courts that under Federal Circuit law they are permitted, indeed required, to read limitations from the preferred embodiment into the claims, a practice prohibited by more than one hundred years of Supreme Court precedent.

The implications of the current law to future patent applications will be far-reaching. Patents will be dominated by lengthy written descriptions consisting of open-ended legalese designed to capture every possible future embodiment of the claimed invention. Thus, anticipatory language in the specification will determine the limits of patent protection instead of the claims. No longer will it be prudent for an inventor to provide in concise and exact terms the preferred embodiment of the invention under Section 112, lest he risk limiting his invention to that single, preferred embodiment. Patents will no longer be focused on inventors claiming inventions; they will become an exercise in predicting as many future commercial products as possible. In other words, defining the scope of patent protection will involve more guesswork than ever.

This case is an ideal candidate for review by this Court because it raises in a single proceeding the intertwined issues of *de novo* review and proper claim construction standards at a time when those issues are ripe for review. Nystrom is aware that the defendants in *Phillips* filed a petition for a writ of certiorari with this Court on November 9, 2005. However, that petition presents only the question concerning *de novo* review of the district court's underlying factual findings. Thus, even if certiorari is granted in *Phillips*, it should also be granted here in order to present this Court with an opportunity to conduct a meaningful, comprehensive review of claim construction law at a time when it is sorely needed. As Judge Mayer put it in his dissenting opinion in *Phillips*, addressing one of these issues without

the other "is akin to rearranging the deck chairs on the Titanic – the orchestra is playing as if nothing is amiss, but the ship is still heading for Davey Jones' locker." *Phillips*, 415 F.3d at 1334-35 (Mayer, J. joined by Newman, J., dissenting). At a minimum, if this Court hears *Phillips*, a decision on the instant petition should be withheld until such time as any change of law can be properly applied to this case, so that the district court's underlying factual determination of the ordinary and customary meaning of "board" can be given due deference.

B. Claim Construction Involves Underlying Factual Determinations By The District Court That Should Be Accorded Deference.

The Federal Circuit's insistence that claim construction does not involve any underlying factual inquiries, and is therefore subject to *de novo* review in its entirety, conflicts with this Court's precedents, with well-reasoned decisions of the Federal Circuit in other areas of patent law, and with Federal Rule of Civil Procedure 52(a). The falsehood that claim construction is devoid of underlying factual inquiries has been perpetuated in no less than three *en banc* opinions of the Federal Circuit over the last ten years. *See, Markman v. Westview Instruments, Inc.* 52 F.3d 967 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996); *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998); *Phillips v. AWH*, 415 F.3d 1303 (Fed. Cir. 2005). In *Phillips*, the Federal Circuit expressly declined to revisit this critical issue, prompting Judge Mayer (joined by Judge Newman) to state in his dissenting opinion that:

> Now more than ever I am convinced of the futility, indeed the absurdity, of this court's persistence in adhering to the falsehood that claim construction is a matter of law devoid of any factual component. Because any attempt to fashion a coherent standard under this regime is pointless, as

> illustrated by our many failed attempts to do so, I dissent.
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> This court was created for the purpose of bringing consistency to the patent field. *See* H.R. Rep. No. 312, 97th Cong., 1st Sess. 20-23 (1981). Instead, we have taken this noble mandate, to reinvigorate the patent and introduce predictability to the field, and focused inappropriate power in this court. In our quest to elevate our importance, we have, however, disregarded our role as an appellate court; the resulting mayhem has seriously undermined the legitimacy of the process, if not the integrity of the institution.

Phillips, 415 F.3d at 1330 (Mayer, J. joined by Newman, J., dissenting).

The Federal Circuit's current claim construction regime not only undermines the integrity of that court, it conflicts with the precedents of this Court. The proper standard of review of mixed questions of law and fact in the context of patent validity was decided by this Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). This Court held that "[w]hile the ultimate question of patent validity is one of law," such a determination "lends itself to several basic factual inquiries." *Id.* at 17. The Court specifically recognized as fact-bound determinations the scope and content of the prior art, and the differences between the prior art and the claims at issue. *Id.* Likewise, claim construction often depends on factual inquiries concerning prior art in the process of reviewing the file history to construe a claim term. The Court also specifically recognized that determining the level of ordinary skill in the pertinent art was based on factual inquiry. *Id.* Since claim construction depends on the meaning of words to one of ordinary skill in the art, the same factual inquiries must be made in a claim construction analysis. In other words, claim construction is no less dependent on factual findings than is patent validity.

In other areas of law, this Court has held that factual determinations by the district courts are deserving of deference even where those determinations are embedded in questions of law reviewed *de novo*. *See, e.g., Ornelas v. United States,* 517 U.S. 690, 699 (1996); *Cooter & Gell v. Hartmarx Corp.,* 496 U.S. 384, 401-05 (1990); *Pierce v. Underwood,* 487 U.S. 552, 560-63 (1998). In *Markman,* this Court acknowledged that "construing a term of art following receipt of evidence" is a "mongrel practice" of fact and law with "evidentiary underpinnings" including "credibility judgments." 517 U.S. at 378, 389-90. The Federal Circuit failed to heed these acknowledgments, however, holding in *Cybor* that the statements were merely "prefatory comments." 138 F.3d at 1455. Though that approach successfully perpetuated the Federal Circuit monopoly on the claim construction process, it did little to explain how the continued adherence to a *de novo* review policy advanced the Federal Circuit's mandate of uniformity in the patent system, let alone why the statements of this Court could be so casually dismissed.

In *Dennison Mfg. Co. v. Panduit Corp.,*[6] this Court held that a determination of "obviousness" under 35 U.S.C. § 103 of the patent laws "lends itself to several basic factual inquiries," and that, unless the Federal Circuit could provide a compelling reason otherwise, the subsidiary determinations of the district court ought to be given deference under Rule 52(a). *Id. at* 810-11 (quoting *Graham,* 383 U.S. at 17-18). On remand, the Federal Circuit agreed that the legal determination of obviousness was based on underlying factual inquiries, stating that "[l]ike all legal conclusions" the determination of obviousness "rests on a factual evidentiary foundation." *Panduit Corp. v. Dennison Mfg. Co.,* 810 F.2d 1561, 1567 (Fed. Cir. 1987). The Federal Circuit has also recognized underlying factual inquiries

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[6] 475 U.S. 809 (1986) (per curium).

deserving of discretion in legal determinations such as inventorship, enablement, and applicability of the on sale bar. *See, e.g., Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1460 (Fed. Cir.1998) ("[T]his court reviews the underlying findings of fact which uphold a district court's inventorship determination for clear error"); *Enzo Biochem Inc. v. Calgene, Inc.*, 188 F.3d 1362, 1369 (Fed. Cir. 1999) ("[W]hether a disclosure is enabling under 35 U.S.C. § 112, ¶ 1, is a question of law that we review *de novo*, based on underlying factual inquiries that we review for clear error"); *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 549 (Fed. Cir. 1990) ("Whether or not an invention was on sale or in public use within the meaning of section 102(b) is a question of law that this court reviews de novo; however, factual findings underlying the trial court's conclusion are subject to the clearly erroneous standard of review"). Despite many opportunities to do so, the Federal Circuit has failed to articulate any legal justification for its continued assertion that the area of claim construction is uniquely devoid of any underlying factual inquiry.

The fiction that claim construction does not involve underlying factual inquiries is best revealed in the post-*Cybor* cases in which the Federal Circuit had to remand for further evidentiary development because it was unable to resolve claim construction without further factual findings.[7] Such remands show that the Federal Circuit simply lacks the arsenal of fact-finding tools available to the district court. The district court often

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[7] *See, e.g., Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1372 (Fed. Cir. 2003) (in order to construe the term "amorphous" alloy, the Federal Circuit remanded, holding that "testimony from those skilled in the art is required to establish the meaning of the term"); *Neomagic Corp. v. Trident Microsystems*, 287 F.3d 1062, 1074 (Fed. Cir. 2002) (to construe "power supply," the Federal Circuit remanded the case "for further evidentiary hearings"); *see also Pall Corp. v. PTI Technologies*, 259 F.3d 1383, 1393-94 (Fed. Cir 2001) (remanded so both parties could submit evidence on extent of the disclosure of a brochure to one skilled in the art).

spends days in *Markman* hearings and tutorials hearing testimony, assessing credibility, reviewing discovery and ordering additional submissions or discovery as needed. The Federal Circuit has only the appellate briefs, the appendix and record, and a few minutes of oral argument from appellate counsel. With such limited fact-finding resources at hand, it is no wonder that claim construction varies so widely from panel to panel and, as in this case, from day to day among the same panel. As this Court has recognized, "[f]act-bound resolutions cannot be made uniform through appellate review, de novo or otherwise." *Cooter,* 496 U.S. at 405 (quoting *Mars Steel Corp. v. Continental Bank N.A.,* 880 F.2d 928, 936 (7th Cir. 1989)).

Petitioner believes that this Court meant what it said in *Markman,* and that claim construction involves fact-finding in the district court. Rule 52(a) requires that deference be given to those findings. *Anderson v. Bessemer City*, 470 U.S. 564, 574 (1985). Even where the district court's findings do not depend on credibility determinations, but are based instead on documentary or physical evidence, and even where the appellate court has the same access to that evidence, Rule 52(a) "does not make exceptions or purport to exclude certain categories of factual findings from the obligation of a court of appeals to accept a district court's findings unless clearly erroneous." *Id.* at 574 (quoting *Pullman-Standard v. Swint,* 456 U.S. 564, 574 (1985)).

The policy behind the rule is important:

> To permit courts of appeals to share more actively in the fact-finding function would tend to undermine the legitimacy of the district courts in the eyes of litigants, multiply appeals by encouraging appellate retrial of some factual issues, and needlessly reallocate judicial authority.

Fed. R. Civ. P. 52 Advisory Committee note (1985 amendment). All three of the tendencies warned of by the Committee have manifested themselves under the

Federal Circuit's *de novo* review policy. Patent litigants already consider pre-appellate litigation a mere "tryout on the road," determinative of nothing until claim construction is ultimately decided by the Federal Circuit. *See Phillips*, 415 F.3d at 1334 (Mayer, J. joined by Newman, J., dissenting). Appeals have become the forum where the facts are decided, and some Federal Circuit judges are pleading with their colleagues to give the fact-finding role back to the district court and abandon the Federal Circuit's "unsound course." *Id.*

Had the Federal Circuit given deference to the district court's underlying factual findings in this case, the ordinary and customary meaning of the claim terms would have been properly applied, and the erroneous claim construction ultimately reached by the Federal Circuit that reads limitations from the specification into the claims would have been avoided. The root of the problem is the Federal Circuit's failure to acknowledge that the district court makes factual findings that should be accorded deference. Lacking the tools to conduct its own evidentiary hearings, the Federal Circuit now places undue reliance on the specification to define claim terms.

However, in writing the specification, the inventor operates under the presumption that the person reading the patent is of ordinary skill in the art, and that the words used by the inventor will be given the full range of their ordinary and customary meaning. *See Markman*, 52 F.3d at 979-81. Obviously, the Federal Circuit judges cannot be skilled in every conceivable art. Consequently, under the Federal Circuit's current claim construction regime, "ordinary meaning" becomes the meaning tied to

the preferred embodiment of the invention contained in the specification. Indeed, in this case, a meaning that was initially found by the panel to be ordinary and customary to one skilled in the art abruptly changed to an "obscure" definition based solely on a reexamination of Nystrom's specification in light of *Phillips*. The lesson is clear: trial courts – not the Federal Circuit and its ever-changing claim construction methods – are best suited to make the underlying factual inquiries necessary for proper claim construction. Until district courts are accorded deference in these matters, patents will continue to be subjected at the appellate level to arbitrary claim constructions devoid of any connection to the real world. *See Phillips*, 415 F.3d at 1330 (Mayer, J. joined by Newman, J., dissenting) ("[T]hese rulings resemble reality, if at all, only by chance"). As a result, the scope of patent protection will remain uncertain to the detriment of the U.S. patent system and to the many inventors world-wide that seek its protection.

C. The Federal Circuit's Claim Construction Method Violates Supreme Court Law.

The bedrock principle that the claims of a patent, not the specification, define the invention dates back to when Congress first required that patents contain a section wherein the inventor "shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery." Act of July 4, 1836, ch. 357, § 6, 5 Stat. 117, 119. Thereafter, this Court has consistently held that the claims, not the specification, are "of primary importance, in the effort to ascertain precisely what it is that is patented." *Merrill v.*

Yeomans, 94 U.S. 568, 570 (1876). [8] Over the past several years, however, the Federal Circuit has departed from this Court's claim-based system of construction and developed its own system in which the specification is of primary importance in determining patent scope.

In *Markman*, this Court held that claim construction was best left to judges, not juries, because judges were considered better suited than juries to construe claim language and, therefore, were more likely to provide uniformity to patent law. The *Markman* decision, however, did not explain how to perform the task of claim construction. That question was addressed three months later by the Federal Circuit in *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576 (Fed. Cir. 1996). In *Vitronics*, the Federal Circuit set forth a hierarchy of evidence for use in construing claims. *Id.* at 1582-23. In keeping with this Court's precedent, *Vitronics* held that the best evidence for determining the scope of a patented invention is the words of the claims. *Id.* at 1582. Those words should be given their ordinary and customary meaning unless the patentee acted as his own lexicographer by assigning a different meaning to the words in the specification. *Id.* The second level of evidence, the specification, was to be reviewed to see if the terms were used in a manner inconsistent with the ordinary meaning of the claim language. *Id.* *Vitronics*

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[8] *See also Howe Machine v. National Needle Co.*, 134 U.S. 388, 394 (1890) ("[T]he specification and drawings are usually looked at only for the purpose of better understanding the meaning of the claim, and certainly not for the purpose of changing it and making it different from what it is"); *Cont'l Paper Bag Co.*, 210 U.S. at 419 ("[T]he claims measure the invention"); *Graver*, 336 U.S. at 277 ("We have frequently held that it is the claim which measures the grant to the patentee"); *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 339 (1961) ("[T]he claims made in the patent are the sole measure of the grant"); *Markman v. Westview Instruments, Inc.*, 52 F3d 967, 980 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996) ("The written description part of the specification itself does not delimit the right to exclude. That is the purpose and function of the claims").

also permitted, but did not mandate, review of the patent's file history, rounding out the three categories of "intrinsic evidence" used in claim construction. *Id.* at 1582-83. As to extrinsic evidence, the court allowed its use for the purposes of understanding the technology, but cautioned against relying on extrinsic evidence to construe the claims. *Id.* at 1583.

The Federal Circuit's view of the usefulness of extrinsic evidence in claim construction changed with *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298 (Fed. Cir. 1999). Believing that the district courts were misinterpreting *Vitronics*, the Federal Circuit held that extrinsic evidence could be "consulted" to ensure that claim constructions were not inconsistent with what was widely understood in the relevant technical field of the invention. *Id.* at 1308-09. The role of extrinsic evidence expanded further in *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F. 3d 1193 (Fed. Cir. 2002). There, the Federal Circuit held that extrinsic evidence such as dictionaries, encyclopedias and treatises could be used to determine the ordinary meaning of a claim term if the meaning was not apparent from the claim language itself. *Id.* at 1202-03. Indeed, the Federal Circuit cautioned against the practice of determining the ordinary meaning initially from the written description and file history, as that could lead to the improper importation of limitations into the claims. *Id.* at 1204. However, review of the written description and file history was appropriate to ensure that the ordinary and customary meaning did not contradict the inventor's use of the term in the patent. *Id.*

In *Phillips*, the Federal Circuit had a change of heart, and all but eliminated the use of dictionary evidence to determine the ordinary meaning of a word

used in a patent claim.[9] *Phillips*, 415 F.3d at 1321-22. Now, the Federal Circuit directs judges to the "context" of the specification to determine the meaning of a word in a patent claim. The two contrasting decisions in this case show that, in practice, the "ordinary meaning" under the Federal Circuit's current claim construction methodology is now confined, as it was in this case, to the particulars of the inventor's preferred embodiment described in the specification – even where the inventor does not act as his own lexicographer to change the ordinary meaning of a claim term, and even where the inventor refrains from disavowing the full scope of the word's ordinary meaning in either the specification or the file history. Despite the lip service given by the Federal Circuit in *Phillips* to this Court's case law that the scope of the invention is measured by the claims, the instant case indisputably illustrates that, under the Federal Circuit's current claim construction method, the claims are no longer the primary source for determining the scope of the invention – the specification is. As Judge Mayer commented,

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[9] Although the Federal Circuit has all but eliminated the role of dictionaries to determine the ordinary and customary meaning of a word used in a patent claim, dictionaries have long been approved for use in interpreting claim language by this Court. *See Exhibit Supply Co. v. Ace Corp.*, 315 U.S. 126, 134 (1942) (relying on dictionary definition to construe the claim term "embedded"); *Weber Elec. Co. v. E.H. Freeman Elec. Co.*, 256 U.S. 668, 678 (1921) (approving appeals court use of dictionaries to define claim terms). Dictionaries, encyclopedias and treatises, publicly available at the time the patent is issued, provide a useful and unbiased source of how words were ordinarily and customarily understood by those skilled in the art. *See Texas Digital*, 308 F.3d at 1202-03 ("Indeed, these materials may be the most meaningful sources of information to aid judges in better understanding both the technology and the terminology used by those skilled in the art to describe the technology"). In a bizarre twist, the Federal Circuit relied exclusively on dictionary definitions in this case to determine the ordinary and customary meaning of the disputed claim term "convex." Such an internal inconsistency highlights the confusion in Federal Circuit law.

"[e]loquent words can mask much mischief." *Id.* at 1334 (Mayer, J. joined by Newman, J., dissenting).

This Court long ago cautioned against the claim construction method now used by the Federal Circuit:

> Some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express. The context may, undoubtedly, be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it, and making it different from what it is. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms. This has been so often expressed in the opinions of this court that it is unnecessary to pursue the subject further.

White v. Dunbar, 119 U.S. 47, 51-52 (1886) (citations omitted).

This Court has also warned against penalizing a patentee for being obedient to the statutory requirement of describing in the specification the best mode of the invention:

> We may take it that, as the statute requires, the specifications just detailed show a way of using the inventor's method, and that he conceived that particular way described was the best one. But he is not confined to that particular mode of use since the claims of the patent, not its specifications, measure the invention. While the claims of a patent may incorporate the specifications or drawings by reference, and thus limit the patent

> to the form described in the specifications, it is not necessary to embrace in the claims or describe in the specifications all possible forms in which the claimed principle may be reduced to practice.

Smith v. Snow, 294 U.S. 1, 11 (1935) (citations omitted).

The Federal Circuit is already fast on its way down the path of routinely limiting the scope of inventions to the written description regardless of the language of the claims. In addition to the instant case, the current Federal Circuit practice of reading limitations from the specification into the claims is exemplified in *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, No. 05-1062, __ F.3d __, 2006 U.S. App. LEXIS 137 (Fed. Cir. Jan. 5, 2006) (order denying petition for rehearing *en banc*). In a concurring opinion published with the order, Judge Lourie, joined by Judges Michel and Newman, stated:

> Claims are not necessarily limited to preferred embodiments, but, if there are no other embodiments, and no other disclosure, *then they may be so limited*.

Id. at 5 (concurring opinion) (emphasis supplied).

Judge Rader, joined by Judge Gajarsa, explained in dissent that *LizardTech* attests to the confusion under current Federal Circuit law. Though *LizardTech* centers on whether the written description supports validity of the claims, Judge Rader acknowledged that "the written description invalidity doctrine is really a claim construction invalidity doctrine." *Id.* at 10, n. 1 (dissenting opinion). He stated that the holding in *LizardTech* limiting the scope of a patent to the preferred embodiment has rendered the Federal Circuit's written description jurisprudence "opaque to the point of obscuring other areas of this court's law," adding that recent disparate outcomes from different panels of the Federal Circuit "must leave practitioners in a quandary." *Id.* at 7, 9. He added, "[p]atent owners and practitioners

must struggle to resolve the tension between *Phillips* and cases like *LizardTech*." *Id.* at 12.

Patent owners and practitioners are also struggling to resolve the tension between the instant case and the claims-based construction method required under this Court's precedent. For instance, in limiting the disputed claim term "manufactured to have," to "woodworking techniques," the Federal Circuit did not even address the claim language of the '831 patent. Based solely on its construction of "board," which included a wood limitation read-in from the specification, the Federal Circuit literally manufactured a "woodworking technique" limitation that appears nowhere in the claims or the specification. Once the Federal Circuit started to import limitations from the specification into the claims, it did not "know where to stop." *McCarthy*, 160 U.S. at 116.

The specification context method used by the Federal Circuit has already proven itself inherently unworkable. Although the specification may be a useful reference for weeding out irrelevant meanings (such as, in this case, "board of directors" or "room and board"), the specification should not serve as a source of limitations absent an express disavowel of claim scope by the patentee. A claim construction method that defines claim terms strictly within the context of the specification will inevitably invite the improper importation of limitations from the specification into the claims. Under such a method, it is impossible for the courts to tell when they have departed from a term's ordinary meaning and started to improperly limit the claim terms to the inventor's preferred embodiment. In the words of Judge Mayer, this "irrational and reckless regime" must be curtailed so that the continued wholesale devaluation of U.S. patents can be avoided.

D. This Case Is Uniquely Qualified And Ripe For Review.

The implications of *Phillips* to the determination of the scope of patent protection is uniquely demonstrated in this case because the Federal Circuit issued two separate claim construction opinions, one before and one after the *en banc* decision in *Phillips*, and reached opposite conclusions as to the proper construction of the term "board." The rehearing order withdrawing the first opinion and replacing it with the second opinion expressly states that rehearing was granted "for the limited purpose of addressing the effects of *Phillips*." There is no plainer example than this case of how the Federal Circuit construes claims under its current regime. District court judges and practitioners will look to this case in attempting to decipher the current state of the law of claim construction in the Federal Circuit. Now is the time for this Court to intervene to prevent the issuance of more claim construction decisions that violate Supreme Court law.

Practitioners and scholars alike have struggled for over a decade to make sense of the Federal Circuit's claim construction decisions. *See, e.g.*, Dunner & Kwon, *Cybor Corp. v. FAS Technologies: The Final Say on Appellate Review of Claim Construction?*, 80 PAT. & TRADEMARK OFF SOC'Y 481 (1998); Staheli, Comment, *Deserved Deference: Reconsidering The De Novo Standard Of Review For Claim Construction*, 3 MARQ. INTELL. PROP. L. REV. 181 (1999); Rooklidge & Weil, *Judicial Hyperactivity: The Federal Circuit's Discomfort With Its Appellate Role*, 15 BERKLEY TECH. L.J. 725 (2000); Bender, *Uncertainty And Unpredictability In Patent Litigation: The Time Is Ripe For A Consistent Claim Construction Methodology*, 8 J. INTELL. PROP. L. 175 (2001); Moore, *Are District Court Judges Equipped To Resolve Patent Cases?*, 15 HARV. J. LAW & TEC. 1 (2001); Gallagher, *The Federal Circuit And Claim Construction: Resolving The Conflict Between The Claims And The*

Written Description, 4 N.C. J. L. & TECH. 121 (2002); Fahmi & Dreszer, *De Novo Review Of Claims Construction Or Wasted Effort Of The District Court,* 19 SANTA CLARA COMPUTER & HIGH TECH. L.J. 315 (2002); Zura, *Looking For Fire Amidst The Smoke – Is The Federal Circuit Really Exceeding Its Authority In Patent Infringement Cases?,* 12 BALT. INTELL. PROP. L.J. 1 (2003); Burgess, Comment, *Simplicity At The Cost Of Clarity: Appellate Review Of Claim Construction And The Failed Promise Of Cybor,* 153 U. PA. L. REV. 763 (2004); Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?,* 9 LEWIS & CLARK L. REV. 231 (2005); Foster & Kessel, *Phillips Leads To A Different Result In 'Nystrom,'* NAT. LAW JOURNAL S3 (Dec 5, 2005). Scholarly analysis of *de novo* review and claim construction will not be advanced by postponing Supreme Court review of these important federal issues.

Supreme Court review of the instant case is essential if this Court intends to conduct a comprehensive review of claim construction law. As previously stated, the petition for a writ of certiorari filed in *Phillips* raises only the *de novo* review issue. If that issue is reviewed by this Court, and especially if this Court finds that the district courts should be granted some discretion in claim construction, the district courts and the bar are still left with a claim construction methodology that is in conflict with decades of law that prohibit the reading of limitations from the written description into broader claim language. Such a method will result in erroneous rulings by the district courts which will be all the more difficult to correct on appeal if they are given deference. A writ of certiorari should be granted in this case to assure that both of the important and intertwined federal questions at stake (i.e., *de novo* review in claim construction and proper claim construction methodology) can be meaningfully addressed by this Court.

CONCLUSION

Mr. Nystrom invented a simple, yet remarkable device that helps keep standing water off decks and porches. Through the U.S. Patent and Trademark Office, he shared his invention with the world, claimed the invention using common words, and described the best way he knew how to make it. In exchange, he is entitled to full and fair patent protection. The Federal Circuit's refusal to give deference to the district court on factual determinations and its improper claim construction methodology have robbed Mr. Nystrom of his patent rights and will do the same to other patentees unless this Court intervenes. Mr. Nystrom respectfully requests that this Petition be granted.

Respectfully submitted,

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.United States Court of Appeals for the Federal Circuit

03-1092

RON NYSTROM,

Plaintiff-Appellant,

v.

TREX COMPANY, INC. and TREX COMPANY, LLC,

Defendants-Appellees.

DECIDED: September 14, 2005

[ENTERED: September 14, 2005]

Before MAYER[1], GAJARSA, and LINN, Circuit Judges.[2]

Ron Nystrom ("Nystrom") appeals from the grant of summary judgment of non-infringement of claims 1-15

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[1] Haldane Robert Mayer vacated the position of Chief Judge on December 24, 2004.

[2] The earlier opinion in this case, reported at 374 F.3d 1105 (Fed. Cir. 2004), is withdrawn, and this opinion is substituted therefor. See Order in this case issued this date.

and 18-20[3] and of invalidity of claims 18-20 of the '831 patent and from an order denying sanctions under 28 U.S.C. § 1927, entered by the United States District Court for the Eastern District of Virginia in favor of defendants TREX Company, Inc. and TREX Company, LLC (collectively "TREX"). Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Oct. 25, 2002) (original final judgment); Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Oct. 21, 2003) (amended final judgment). Because the district court correctly construed "board" and "manufactured to have," we affirm the district court's grant of summary judgment of non-infringement of claims 1-15 and 18-20. However, we reverse the district court's construction of "convex top surface" and the district court's grant of summary judgment of invalidity of claims 18-20 and remand the case to the district court for further proceedings. Further, because the district court did not abuse its discretion in denying Nystrom's motion for sanctions under 28 U.S.C. § 1927, we affirm the district court's disposition of that motion.

I. BACKGROUND

A. The '831 Patent

The '831 patent is directed to construction material for use in flooring surfaces: specifically, boards for use in constructing an exterior floor, such as a deck.

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[3] The district court granted TREX's motion for summary judgment of non-infringement. Although it is not entirely clear from the record, that motion was apparently for all claims of U.S. Patent No. 5,474,831 ("the '831 patent"). The district court also granted TREX's separate motion for partial summary judgment of non-infringement of claims 16 and 17. Nystrom has raised no argument on appeal that would affect the district court's grant of summary judgment of non-infringement of claims 16 and 17. Thus, on the issue of infringement, only the district court's grant of summary judgment of non-infringement of claims 1-15 and 18-20 is before us.

'831 patent, col. 1, II. 6-8. The invention described and claimed in the patent is an exterior wood flooring board shaped to shed water from its upper surface while at the same time providing a surface on which it is comfortable to walk and stand. Id. at col. 2, II. 8-11. In the Summary of Invention, the patent describes the invention as "a decking board which is shaped to shed water from its upper surface, and which also yields a superior product when cut from a log, reducing the amount of scrap in the outermost boards cut from a log." Id. at col. 2, II. 20-24. Figure 2, reproduced below, provides a transverse sectional view of the preferred embodiment of the invention:

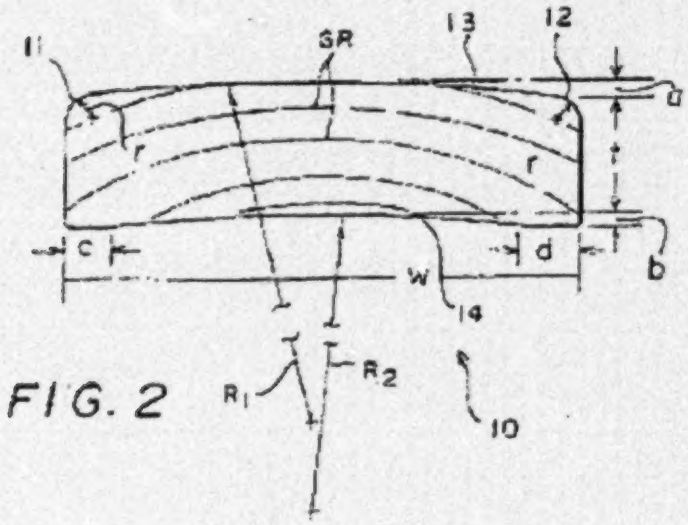

FIG. 2

Id. at col. 2, II. 49-50. The embodiment depicted in Figure 2 is described in the '831 patent specification as follows:

> The board specifically shown and described herein has generally the size and shape of a so-called 5/4 decking board, with rounded top side edges **11** and **12** each having a radius of curvature r of about one-quarter of an inch. The board **10** differs slightly in width w and thickness t from a

> standard decking board, however, in that it has a width of only about 5 inches and a thickness of about 1-3/8 inches.
>
> More importantly, the board of the invention has a slightly rounded upper surface **13** that slopes gradually off to either side of the center of the board, defining a convex surface that promotes the running off of water. This surface may have a radius of curvature R_1, for example, of about 24 inches.
>
> Further, in a preferred construction the board also has a complementally shaped concave bottom surface **14** with a radius of curvature R_2 of about 24 inches, placed to leave two relatively flat side panels c and d along opposite edges of the board.
>
> The curved top surface has a total fall or drop a from the center to each side edge of about 1/8 of an inch, and the curved bottom surface similarly has a total recess b from the plane of the two side panels to the deepest part at the center of the board of about 1/8 of an inch.

Id. at col. 3, ll. 1-24.

Independent claim 1 contains all of the disputed claim terms, and provides (with the disputed terms highlighted):

> 1. A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite

> side edges, said top surface being manufactured to have a slightly rounded or curved configuration from a longitudinal center line thereof downwardly toward each side edge, thereby defining a convex top surface which sheds water and at the same time is comfortable to walk on, and said bottom surface having a concave configuration for nesting engagement with the top surface of another board so that a plurality of the boards may be stacked one on top of the other with the stability of conventional boards having flat top and bottom surfaces.

Id. at col. 4, II. 19-30.

Independent claim 18 is representative of the claims for which invalidity is disputed, and provides (with the disputed limitation highlighted):

> 18. A decking board for use in constructing a flooring surface for exterior use, said board having a convex top surface, a bottom surface and opposite side edges; said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, defining a difference in thickness between the longitudinal centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40; and said convex top surface serving to shed water from said board when exposed to weather, and at the same time, when a plurality of said boards are laid in side-by-

> side relationship, presenting a surface that is comfortable to stand and walk on.

Id. at col. 6, II. 16-29.

B. Proceedings Below

Nystrom is the inventor and sole owner of the '831 patent. He is a working carpenter and the owner of a two-truck, two-employee lumberyard. He has been in the business of building exterior decks for twenty-five years. TREX is a manufacturer of exterior decking planks made from composites of wood fibers and recycled plastic. On December 5, 2001, Nystrom filed suit in the Eastern District of Virginia, alleging TREX infringed the '831 patent. TREX counterclaimed, seeking a declaratory judgment of non-infringement, invalidity, and unenforceability, and alleging antitrust violations on the part of Nystrom, his company, and his attorneys. Nystrom then filed a motion to dismiss the antitrust counterclaims. In response, TREX voluntarily dismissed the antitrust counterclaims, but then filed an amended antitrust counterclaim alleging many of the same antitrust violations against Nystrom alone. Soon after the amended counterclaim was filed, TREX dismissed its amended antitrust counterclaim, prompting Nystrom to move for sanctions on the ground that TREX's attorneys "multiplie[d] the proceedings ... unreasonably and vexatiously." 28 U.S.C. § 1927 (2000). The district court denied the motion for sanctions under § 1927. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. July 2, 2002) ("Sanctions Order").

In due course, the district court held a Markman hearing and issued a claim construction ruling concerning three disputed claim terms of the '831 patent. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Aug. 19, 2002) ("Claim Construction Order"). Based on the district

court's claim construction ruling, Nystrom conceded that he could not prove his infringement case against TREX. Therefore, Nystrom asked the district court to enter judgment of non-infringement in favor of TREX and to dismiss TREX's invalidity and unenforceability counterclaims without prejudice. TREX then moved for summary judgment of non-infringement and for summary judgment of invalidity of claims 18-20. The district court entered judgment of non-infringement of all claims and deferred ruling on the outstanding motion regarding claims 18-20. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Sept. 11, 2002). Subsequently, the district court granted TREX's motion for summary judgment of invalidity of claims 18-20. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Oct. 17, 2002) ("Invalidity Order"). On October 25, 2002, the district court entered its initial final judgment. In that judgment, the invalidity and unenforceability counterclaims regarding claims 1-17 were stayed pending appeal.

Nystrom appealed the claim construction rulings, the grant of summary judgment of non-infringement based thereon, the grant of summary judgment of invalidity of claims 18-20, and the district court's denial of sanctions to this court. On August 8, 2003, we dismissed Nystrom's appeal for lack of finality in light of the stayed invalidity and unenforceability counterclaims regarding claims 1-17. Nystrom v. TREX Co., Inc., 339 F.3d 1347 (Fed. Cir. 2003). Following the entry by the district court on October 21, 2003 of an Amended Final Judgment nunc pro tunc October 25, 2002, that repeated the previously entered judgments of non-infringement and of invalidity of claims 18-20 and dismissed without prejudice the remainder of TREX's declaratory judgment counterclaims regarding claims 1-17, we reinstated the appeal. Nystrom v. TREX Co., Inc., 83 Fed. Appx. 321, 322 (Fed. Cir. 2003).

We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) and address the merits of Nystrom's appeal in this opinion.

II. DISCUSSION

A. Standard of Review

"We review the grant of summary judgment de novo, drawing all reasonable inferences in favor of the non-moving party." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1323 (Fed. Cir. 2002) (citing Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986)). Summary judgment is only appropriate if there are no genuine issues of material fact and the movant is entitled to judgment as a matter of law. SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1116 (Fed. Cir. 1985) (en banc).

Claim construction is a question of law reviewed de novo. Ferguson Beauregard v. Mega Svs., Inc., 350 F.3d 1327, 1338 (Fed. Cir. 2003). Infringement, whether literal or under the doctrine of equivalents, is a question of fact. Id.

This court reviews a district court's denial of a motion for sanctions under 28 U.S.C. § 1927 pursuant to the law of the regional circuit. See Phonometrics, Inc. v. Westin Hotel Co., 350 F.3d 1242, 1246 (Fed. Cir. 2003). The Fourth Circuit reviews the denial of sanctions pursuant to § 1927 for an abuse of discretion. Chaudhry v. Gallerizzo, 174 F.3d 394, 410 (4th Cir. 1999).

B. Claim Construction

Nystrom argues that the district court misconstrued three patent claim limitations: "board," "manufactured to have," and "convex top surface." TREX

responds that the district court's claim constructions were correct.

1. "Board"

The district court construed the word "board" in independent claim 1 to mean a "piece of elongated construction material made from wood cut from a log." Claim Construction Order, slip op. at 9. The district court held that Nystrom had limited the scope of the claim term "board" by statements in the written description that a board is cut or obtained from a log, id. at 7 (citing '831 patent, col. 2, II. 22-23; id. at col. 2, I. 34), and statements made by Nystrom during prosecution in arguing against an obviousness rejection, id. at 8.

Nystrom argues that "board" in claim 1 is not limited to conventional wood boards that are cut from a log. He argues that the claim language "board" does not contain a description of the material from which the board is composed and that the claim should not be so limited. He contends it was error for the district court to rely on statements in the specification to limit the claim because those statements do not represent a clear disavowal of claim scope. Moreover, Nystrom asserts that there was no disavowal in the prosecution history, because his comment in response to an obviousness rejection was not intended to limit but to establish that the resin tiles disclosed in the Yoshida reference were not properly combined with the wood planks of the Zagelmeyer reference in the examiner's § 103 obviousness rejection. Thus, Nystrom argues, the comment was not such a clear and unambiguous disclaimer as to justify limiting the claim term.

TREX responds that the ordinary meaning of "board" is a piece of sawn lumber. Because the specification only disclosed a board as made of wood and cut from a log, TREX contends that the claim term

"board" must be limited to wood boards cut from a log. TREX further argues that Nystrom disclaimed non-wood boards by the statements he made during prosecution in overcoming an obviousness rejection based on Yoshida and Zagelmeyer.

As this court recently articulated in our en banc decision in Phillips v. AWH Corp., "[i]t is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Therefore, we begin our claim construction analysis with the words of the claim. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). The words of the claim are generally given their ordinary and customary meaning. Id. at 1582. The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." Phillips, 415 F.3d at 1313. The person of ordinary skill in the art views the claim term in the light of the entire intrinsic record. See id. Thus, the claims "must be read in view of the specification, of which they are a part." Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc). "The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.'" Phillips, 415 F.3d at 1316 (quoting Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). In addition to the written description, "the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Id. at 1317. In discerning the meaning of claim terms, resort

to dictionaries and treatises also may be helpful. Id. at 1318. However, "undue reliance on extrinsic evidence poses the risk that it will be used to change the meaning of claims in derogation of the 'indisputable public records consisting of the claims, the specification and the prosecution history,' thereby undermining the public notice function of patents." Id. at 1319 (quoting Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1578 (Fed. Cir. 1995)).

The claims at issue do not include any language describing the "board" as cut from a log or necessarily being made of wood. In fact, claim 16, which is similar to claim 1, covers "[a] wood decking board for use in constructing a flooring surface for exterior use, said decking board having a convex top surface, a bottom surface, opposite side edges, and curved growth rings...." '831 patent, col. 5, II. 32-35 (emphases added). By contrast, claim 1 simply claims a "board," without restricting the term to a particular material or describing characteristics of wooden boards cut from logs. See id. at col. 4, II. 19-21 ("A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite side edges . . ." (emphases added)). When different words or phrases are used in separate claims, a difference in meaning is presumed. Tandon Corp. v. United States Int'l Trade Comm'n, 831 F.2d 1017, 1023 (Fed. Cir. 1987). This principle of claim construction would suggest that the difference in the use of terms has significance and that "board" should not be limited to wood that is cut from a log. However, simply noting the difference in the use of claim language does not end the matter. Different terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading of the terms or phrases is proper. Id. at 1023-24 (affirming the International Trade Commission's holding that "the

inclusion of the term 'non-gimballed' in claim 5 did not require that claims 1 and 12 be read to encompass a gimballed first transducer").

An examination of the term "board" in the context of the written description and prosecution history of the '831 patent leads to the conclusion that the term "board" must be limited to wood cut from a log. The written description begins by noting that "[a] variety of specialized flooring materials have been developed for interior and exterior use." '831 patent, col. 1, 11. 13-14. The discussion then proceeds to the specific context of wood flooring materials for exterior use. In the context of the discussion of wood flooring materials for exterior use, the patent states, "In all conventional flooring materials known to applicant, the top and bottom horizontal surfaces of these flooring materials are flat and planar. As a result, water tends to stand on the surface of the decking material, causing it to deteriorate more quickly than it otherwise would." Id. at II. 57-61. The discussion continues, "Further, the process used to cut such lumber from logs can produce inferior product on the outermost boards, often leading to scrap." Id. at II. 65-67. The Background of the Invention, thus, frames the invention in the context of wood decking materials cut from logs, even though it acknowledges that other materials exist.

This context is maintained throughout the written description. For example, the written description states, "With particular reference to FIGS. 1-5, it can be seen that the convex top surface 13 is curved in the same general direction as the curvature of the growth rings GR." Id. at col. 3, II. 25-27. The written description goes on to note that the manner of installation of conventional decking boards "leads to accelerated deterioration of the boards when exposed to weather." Id. at II. 34-35. Similarly, the written description states, "FIG. 4 shows the relationship of the outermost boards B cut from a log

L." Id. at II. 65-66. Throughout the written description, Nystrom consistently used the term "board" to describe wood decking material cut from a log. See AquaTex Indus., Inc. v. Techniche Solutions, No. 05-1088, slip op. at 9 (Fed. Cir. Aug. 19, 2005) ("Here, the context of the specification 'makes clear that the patentee did not intend the term [fiberfill] to encompass' natural materials." (citation omitted)).

The prosecution history provides additional context that is consistent with the written description. In a preliminary amendment, Nystrom stated that "the particular configuration and dimensions of the board result in a uniformly superior product and reduction in waste or rejects due to bark or other flaws along the edges of the board when it is cut from near the outer circumference of a log." Prelim. Amendment at 2. In responding to a rejection, Nystrom stated,

> The present invention represents a unique and significant advance in the art of exterior wood flooring. Wood floors have been in use for hundreds of years, and except for the development of different installation techniques, i.e., the use of nails, screws, various fastening clips, and/or adhesives, very little has been done to the basic shape of the board itself.

Amendment rec'd Sept. 30, 1993, at 2. Similarly, when arguing against an obviousness rejection, Nystrom stated, "YOSIDA [sic] is clearly not concerned with materials made from wood, and especially an elongate board for exterior use and having a convex top surface when installed that will shed water and at the same time provide a surface that is suitable for supporting furniture and comfortable to walk on." Id. at 4. Although Nystrom argues that the latter statement was limited to

explaining why Yoshida could not be combined with the Zagelmeyer reference, which was directed to wood, we are not convinced that the statement is so limited. Nystrom explained in the same response that "the extent of curvature used by ZAGELMEYER in his boards was such that a distinctly uneven surface resulted, giving any surface constructed from them a corduroy-like texture which would have been unsuitable for supporting furniture, and which would have produced a distinct tactile sensation of roughness or uneven surface." Id. at 3. Thus, it is clear that when Nystrom was distinguishing Yoshida from an elongate board that is suitable for supporting furniture and comfortable to walk on, he was referring to the invention and not Zagelmeyer. We need not decide, however, whether this statement represents a clear disavowal of claim scope because the context reflects Nystrom's consistent use of the term board to refer to wood decking materials cut from a log.

Nystrom contends that although some dictionaries define "board" solely in reference to its material composition, see Webster's Third International Dictionary 243 (2002) (defining "board" as "a piece of sawed lumber of little thickness but considerable surface area usu. being rectangular and of a length generally exceeding its width"), not all dictionaries are so constrained. For example, the American Heritage Dictionary of the English Language 203 (4th ed. 2000) defines "board" as "1. A long flat slab of sawed lumber; a plank. 2. A flat piece of wood or similarly rigid material adapted for a special use." Nystrom argues that the ordinary meaning of the word "board" encompasses both a piece of cut wood or sawn timber and a similarly-shaped item made of a rigid material.

However, as explained in Phillips, Nystrom is not entitled to a claim construction divorced from the context of the written description and prosecution history. The

written description and prosecution history consistently use the term "board" to refer to wood decking materials cut from a log. Nystrom argues repeatedly that there is no disavowal of scope in the written description or prosecution history. Nystrom's argument is misplaced. Phillips, 415 F.3d at 1321 ("The problem is that if the district court starts with the broad dictionary definition in every case and fails to fully appreciate how the specification implicitly limits that definition, the error will systematically cause the construction of the claim to be unduly expansive."). What Phillips now counsels is that in the absence of something in the written description and/or prosecution history to provide explicit or implicit notice to the public—i.e., those of ordinary skill in the art—that the inventor intended a disputed term to cover more than the ordinary and customary meaning revealed by the context of the intrinsic record, it is improper to read the term to encompass a broader definition simply because it may be found in a dictionary, treatise, or other extrinsic source. Id.; see also Snow v. Lake Shore & Mich. S. Ry. Co., 121 U.S. 617, 629-30 (1887) ("It is not admissible to adopt the argument made on behalf of the appellants, that this language is to be taken as a mere recommendation by the patentee of the manner in which he prefers to arrange these parts of his machine. There is nothing in the context to indicate that the patentee contemplated any alternative for the arrangement of the piston and piston-rod.").

Our recent decision in AquaTex Industries illustrates this principle. In that case, the patentee consistently used the term "fiberfill" throughout the written description to refer to synthetic materials. Although the written description indicated that the composition of the fiberfill was not known to be critical, we held that "the context of the specification 'makes clear that the patentee did not intend the term [fiberfill] to encompass' natural materials." Id., slip op. at 9 (citation

omitted). In particular, we noted that "[n]one of the patents [incorporated by reference] discusses the possibility of using natural fibers as commercial fiberfill batting." Id., slip op. at 10. Although there was no disavowal of natural materials, we held that the consistent use of the term "fiberfill" to refer to synthetic materials and the extrinsic definitions supporting that interpretation led to the conclusion that a person of ordinary skill in the art would have understood the term to be limited to synthetic materials. The present case is analogous. Nystrom consistently used the term "board" to refer to wood cut from a log. Although there was no clear disavowal of claim scope, there was nothing in the intrinsic record to support the conclusion that a skilled artisan would have construed the term "board" more broadly than a piece of construction material made from wood cut from a log.

In Phillips, we held that the term "baffle" did not require any specific angle—even in view of the written description's limited disclosure of baffles oriented at right angles to the walls—because the ordinary meaning of the term "baffle," as reflected in a dictionary definition to which the parties stipulated and as supported by the overall context of the written description, was simply "objects that check, impede, or obstruct the flow of something." 415 F.3d at 1324. In this case, both parties acknowledge the ordinary meaning of "board" as "a piece of sawed lumber." Nystrom, however, seeks to broaden the term "board" to encompass relatively obscure definitions that are not supported by the written description or prosecution history. Broadening of the ordinary meaning of a term in the absence of support in the intrinsic record indicating that such a broad meaning was intended violates the principles articulated in Phillips. Therefore, we affirm the district court's construction of the term "board."

2. "Manufactured To Have"

The district court construed the expression "manufactured to have" as used in claim 1 of the '831 patent to be "a manufacturing process utilizing woodworking techniques." Claim Construction Order, slip op. at 11. The district court relied on statements in the '831 patent written description that "the advantages of the invention" were achieved through "cutting or milling and the like." Id. at 10. The district court found this statement in the written description, combined with its prior construction of the claim term "board" to be "construction material made from wood cut from a log," to be tantamount to a redefinition of the scope of the claimed manufacturing process. Id. at 11.

Nystrom argues that for many of the same reasons the district court erred in construing the word "board," the district court's construction of the phrase "manufactured to have" is also in error. Further, he argues the district court's reliance on language in the written description mentioning "cutting or milling or the like" impermissibly reads a limitation from a preferred embodiment into the claim. TREX responds that the district court properly relied on the reference to "cutting or milling and the like" in restricting "manufactured to have" in all of the claims to solely woodworking techniques. TREX argues that the district court's construction makes sense because the '831 patent covers only wood materials.

In light of our construction of "board" as encompassing only materials made from wood cut from a log, we see no error in the district court's limitation of the phrase "manufactured to have" in claim 1 to woodworking techniques. The use of the phrase "manufactured to have" in reference to the top surface of the board is necessarily limited to manufacturing techniques related to wood.

Thus, we affirm the district court's construction of "manufactured to have."

3. "Convex Top Surface"

The district court construed "convex top surface" to mean "an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between 4:1 to 6:1." Claim Construction Order, slip op. at 13. It noted that "the specification does not contain any indication that the term convex top surface is to be assigned a specific range of curvature." Id. at 12. The district court relied on statements the applicant made in the prosecution history that "the preferred [radius of curvature] ration [sic, ratio] is about 5:1." Id. at 13.

Nystrom argues that the district court erred by ignoring the ordinary and customary meaning of this claim term, which is "an upper surface with an outward curve," and by importing additional limitations into this claim term from the written description. He observes that claim 1 does not provide an explicit radius of curvature ratio, and that such radii measurements are recited only in dependent claims 3, 7, and 13. Nystrom also argues that the district court erred in finding that he restricted the term to a specific radius of curvature to overcome a rejection based on the Zagelmeyer reference. He thus contends it was error for the court to construe "convex top surface" to include a specific radius of curvature ratio. TREX responds that the district court properly held that Nystrom limited his claim to a particular radius of curvature in the range of 4:1 to 6:1 to distinguish the invention over the prior art Zagelmeyer reference.

The dictionary definition of the claim term "convex" is "having a surface or boundary that curves or bulges outward, as the exterior of a sphere." American Heritage Dictionary of the English Language 402 (4th ed.

2000). This is consistent with the specification of the '831 patent. See, e.g., '831 patent, col. 3, II. 10-14 ("More importantly, the board of the invention has a slightly rounded upper surface 13 that slopes gradually off to either side of the center of the board, defining a convex surface that promotes the running off of water. This surface may have a radius of curvature R_1, for example, of about 24 inches."). The district court relied on statements Nystrom made during prosecution to distinguish the Zagelmeyer reference as limiting the expression "convex top surface" to a surface with a radius of curvature in the range of 4:1 to 6:1. Claim Construction Order, slip op. at 12-13. Nystrom stated in a supplemental amendment amending claim 16 of the issued patent (referred to as claim 19 during prosecution):

> Applicant then began trying different radiuses of curvature, but some were too shallow and when the board tried it tended not to shed water. Others had too short a radius of curvature and a distinct sensation of an uneven surface. Eventually, by trying a variety of curvatures, applicant discovered that a ratio of radius of curvature to width of the board of about 5:1 produced the desired result, i.e., it shed water and did not produce and uneven sensation to someone standing on it.
>
> * * *
>
> Claim 19 [claim 16 in the issued patent] and the claims dependent therefrom (the remaining claims have been previously allowed), are directed to a decking board that has a particular configuration which produces specific results not achieved with any of the prior art. ... It should be noted,

> however, that the ratio of the radius of curvature of a board to its width can vary within certain relatively narrow limits, e.g. from about 4:1 to about 6:1, and still meet the basic objectives of the invention, although the preferred ratio is about 5:1. Anything much outside this range does not provide satisfactory performance and/or is not acceptable to the consumer.

Supplemental Amendment, Sept 7, 1994, at 2-3 (emphasis added). The district court noted that Nystrom's statement that "[a]nything much outside this range ... is not acceptable" implied that his statements regarding the radius of curvature ratio applied to the entire patent, and was not intended to apply solely to issued claim 16.

The district court erred in its analysis of the prosecution history. Nystrom's statements were expressly directed to issued claim 16. There is no indication that Nystrom intended the term "convex top surface" in all of the pending patent claims to be limited to a specific radius of curvature ratio. The district court ignored the fact that the language of claim 16 at the time Nystrom made the disputed statements included the following claim language expressly providing for a radius of curvature ratio of approximately 5:1: "said top surface having a radius of curvature that is approximately five times as great as the width of the board, thereby defining a smoothly shaped and shallow convex top surface that sheds water . . ." Supplemental Amendment, Sept. 7, 1994, at 1 (emphasis added).

Other statements in the prosecution history support this view. Nystrom points to the examiner's prior rejection of claims 1, 2, 5, 6, 11 and 12 under 35 U.S.C. § 102(b): "This rejection is being made over the broad claims since they fail to specify any particular degree for

the curve of the board." Examiner's Action, Mar. 24, 1994, at 2. The examiner eventually allowed claims 1-14 and 18 because the "prior art fail[ed] to teach both sides of the board with a curved configuration," not because the invented board specified a particular radius of curvature ratio. Examiner's Action, Dec. 8, 1994, at 4. The prosecution history did not redefine or disclaim "convex top surface" in claim 1 to be limited to a particular radius of curvature ratio. Accordingly, we hold that the correct construction of the expression "convex top surface" as used in claim 1 is the ordinary and customary meaning of an upper surface that curves or bulges outward, as the exterior of a sphere.

C. Invalidity

The district court granted summary judgment in favor of TREX, holding claims 18-20 of the '831 patent invalid as anticipated in light of the Zagelmeyer reference. The parties principally dispute whether Figure 3 of the Zagelmeyer patent anticipates the following limitation of independent claim 18:

> said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, defining a difference in thickness between the longitudinal centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40....

'831 patent, col. 6, ll. 18-25 (emphasis added). The district court held that boards 2, 3, and 5 depicted in Figure 3 of the Zagelmeyer patent anticipate this limitation by illustrating a board with a convex top having a relevant thickness ratio to the width of the

board of 1:39, 1:39, and 1:37, respectively. Invalidity Order, slip op. at 6. The district court found that our precedents in Hockerson-Halberstadt, Inc. v. Avia Group International, Inc., 222 F.3d 951 (Fed. Cir. 2000), and In re Wright, 569 F.2d 1124 (CCPA 1977), were not applicable, because it considered the correct inquiry to be whether a person of ordinary skill in the art would use measurements from the Zagelmeyer reference to ascertain the degree of curvature. Invalidity Order, slip op. at 6-7. Finding that a person of skill in the art would take such measurements from the boards depicted in Figure 3 of the Zagelmeyer patent, the district court found claim 18 and the associated dependent claims anticipated. Id. at 7.

Nystrom argues that the district court erred by basing its invalidity determination not on the disclosure of the Zagelmeyer patent itself, but instead from renderings made by a TREX employee of hypothetical boards based on the perspective drawings in the Zagelmeyer patent, He argues this violates our precedent in Hockerson-Halberstadt that "patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." Hockerson-Halberstadt, 222 F.3d at 956 (citing In re Wright, 569 F.2d at 1127). Nystrom contends that the district court erred in relying on extrinsic evidence in invalidating the '831 patent. The invalidity data relied on by the district court was generated by a TREX employee who made a software model of the boards depicted in the perspective drawings of Figure 3 of Zagelmeyer patent, then performed computations on the modeled boards to come up with the allegedly invalidating curvature to width ratio.

TREX responds that the district court correctly found that it had presented evidence that persons of

ordinary skill in the art would understand Zagelmeyer to disclose the same dimensions as claims 18-20. TREX submitted declarations that it contended detailed the process by which the boards depicted in the Zagelmeyer reference were modeled and from which the invalidating measurements were taken.

"A party seeking to establish that particular claims are invalid must overcome the presumption of validity in 35 U.S.C. § 282 by clear and convincing evidence." State Contracting & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1067 (Fed. Cir. 2003). A patent is invalid as anticipated if every limitation in a claim is found in a single prior art reference. Teleflex, 299 F.3d at 1335.

The district court erred in not properly applying the principles set forth in our prior precedents that arguments based on drawings not explicitly made to scale in issued patents are unavailing. Hockerson-Halberstadt indicated our disfavor in reading precise proportions into patent drawings which do not expressly provide such proportions:

> The '792 patent is devoid of any indication that the proportions of the groove and fins are drawn to scale. [The patent owner's] argument thus hinges on an inference drawn from certain figures about the quantitative relationship between the respective widths of the groove and fins. Under our precedent, however, it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.

Hockerson-Halberstadt, 222 F.3d at 956 (citing In re Wright, 569 F.2d at 1127). In re Wright similarly noted:

> We disagree with the [PTO]'s conclusion, reached by a comparison of the relative dimensions of appellant's and [the] Bauer [reference]'s drawing figures, that Bauer "clearly points to the use of a chime length of roughly 1/2 to 1 inch for a whiskey barrel." This ignores the fact that Bauer does not disclose that his drawings are to scale. Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value.

569 F.2d at 1127.

The district court's acceptance of TREX's invalidity arguments based on models made from drawings contained in the Zagelmeyer patent was incorrect. The basis of the district court's summary judgment of invalidity was a model that TREX developed based on that reference, and not on drawing dimensions or a written disclosure of dimensions contained directly in the patent itself. Under the principles set forth in our prior cases, the speculative modeling premised on unstated assumptions in prior art patent drawings cannot be the basis for challenging the validity of claims reciting specific dimensions not disclosed directly in such prior art. Thus, we conclude that the district court erred in granting summary judgment of invalidity based on TREX's models.

Because the district court erred in determining invalidity based on evidence improperly derived from a patent drawing, we need not address Nystrom's argument based on the district court's rejection of Nystrom's

declaration. For the reasons stated, we reverse the district court's summary judgment of invalidity of claims 18-20 of the '831 patent as anticipated by Zagelmeyer.

D. Sanctions

Section 1927, in Title 28 of the United States Code, imposes liability on counsel for excessive costs, and provides:

> Any attorney or other person admitted to conduct cases in any court of the United States or any Territory thereof who so multiplies the proceedings in any case unreasonably and vexatiously may be required by the court to satisfy personally the excess costs, expenses, and attorneys' fees reasonably incurred because of such conduct.

28 U.S.C. § 1927 (2000). The Supreme Court has explained that § 1927 "is indifferent to the equities of a dispute and to the values advanced by the substantive law. It is concerned only with limiting the abuse of court processes." Roadway Express, Inc. v. Piper, 447 U.S. 752, 762 (1980).

Under the law of the Fourth Circuit, the district court's decision denying sanctions pursuant to 28 U.S.C. § 1927 is reviewed for an abuse of discretion. Chaudhry, 174 F.3d at 410. "A district court abuses its discretion if its conclusion is guided by erroneous legal principles, or rests upon a clearly erroneous factual finding." Westberry v. Gislaved Gummi AB, 178 F.3d 257, 261 (4th Cir. 1999) (internal citation omitted). An appellate court "is obligated to review the record and reasons offered by the district court and to reverse if the court has a definite and firm conviction that the court below committed a clear

error of judgment in the conclusion it reached upon a weighing of the relevant factors." Id. (internal quotation marks omitted). "[S]ection 1927 also requires a finding of counsel's bad faith as a precondition to the imposition of fees." Chaudhry, 174 F.3d at 411 n.14 (internal quotation marks omitted). The Fourth Circuit has further held "as a matter of law that the filing of a single complaint cannot be held to have multiplied the proceedings unreasonably and vexatiously and therefore that § 1927 cannot be employed to impose sanctions." DeBauche v. Trani, 191 F.3d 499, 511-12 (4th Cir. 1999).

TREX's counsel originally filed four antitrust counterclaims and a supporting brief in response to Nystrom's infringement complaint ("the original counterclaims"). TREX voluntarily dismissed these original counterclaims and then filed a second, amended antitrust counterclaim ("amended counterclaim"). TREX's counsel eventually dropped its original and amended counterclaims. Nystrom sought § 1927 sanctions against TREX. In light of DeBauche v. Trani, 191 F.3d at 511-12, which held as a matter of law that the filing of a single complaint cannot multiply the proceedings unreasonably under § 1927, the district court limited its inquiry to whether TREX's filing of the amended counterclaim was a basis for sanctions in this case.

Nystrom argues that the district court erred in finding that TREX had pled all of the essential elements of an antitrust counterclaim in its amended counterclaim, because TREX failed to establish that Nystrom posed a dangerous probability of success in monopolizing the relevant market for composite decking. Nystrom argues that when TREX's counsel filed the amended counterclaim, it "knew as a matter of law" that Nystrom lacked market power in the composite decking market because TREX's counsel knew both that Nystrom was not a participant in that market and that the '831 patent

itself did not create the required market power in that market. Appellant's Br. at 61-63.

TREX responds that it had ample evidentiary basis for its amended counterclaims, even though it admits its original counterclaims were flawed. TREX asserts that when the flaws in its original counterclaims were pointed out, its counsel immediately admitted the mistake and amended them. TREX argues that its counsel did not act in bad faith and that the district court did not abuse its discretion in denying § 1927 sanctions.

The district court declined to find that TREX acted in bad faith in alleging that Nystrom posed a dangerous probability of success in monopolizing the relevant market. Sanctions Order, slip op. at 7. Although Nystrom asserted to the district court that he operated solely in the market for milled decking material, TREX asserted that it relied on several statements by Nystrom during the prosecution of the '831 patent that he intended to monopolize both the milled and composite decking material markets. Id. at 6-7. Stating that it lacked sufficient evidence to limit TREX's supporting evidence to products only in the milled decking material market, the district court declined to find bad faith on the part of TREX and award § 1927 sanctions. Id. at 7.

Nystrom fails to establish how the district court's conclusion that it lacked sufficient evidence to find TREX acted in bad faith in filing its amended counterclaim constituted an abuse of discretion. From our review of the statements that TREX relied upon in its amended counterclaim, it is not clear which market Nystrom was referencing when he stated in the prosecution history that "licensing negotiations are presently underway with most major manufacturers and distributors of decking boards," Prelim. Amendment at 3, and the "product. . . has the potential of capturing a significant market

share," Amendment rec'd Sept. 30, 1993, at 5. The district court's finding that these statements were not limited just to the milled decking material market was not clearly erroneous. The district court did not err in declining to find TREX acted in bad faith. Because there was no legal error or clearly erroneous factual finding underlying the district court's conclusion that Nystrom had failed to present sufficient evidence to justify the imposition of sanctions, see Westberry, 178 F.3d at 261, the court did not abuse its discretion in declining to award § 1927 sanctions.

CONCLUSION

Because we affirm the district court's constructions of "board" and "manufactured to have," we affirm the district court's grant of summary judgment of non-infringement of claims 1-15 and 18-20. We reverse the district court's construction of "convex top surface." The district court's summary judgment of invalidity of claims 18-20 of the '831 patent as anticipated by the Zagelmeyer reference is also reversed. Because the district court did not abuse its discretion, we affirm the district court's refusal to award sanctions under 28 U.S.C. § 1927 in favor of Nystrom. The case is remanded for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, REVERSED-IN-PART, AND REMANDED

COSTS

No costs.

United States Court of Appeals for the Federal Circuit

03-1092

RON NYSTROM,

Plaintiff-Appellant,

v.

TREX COMPANY, INC. and TREX COMPANY, LLC,

Defendants-Appellees.

Judgment

[ENTERED: September 14, 2005]

ON APPEAL from the United States District Court for the Eastern District of Virginia

In CASE NO(S). 01-CV-905

This CAUSE having been heard and considered, it is

ORDERED and ADJUDGED: AFFIRMED-IN-PART, REVERSED-IN-PART, AND REMANDED

ENTERED BY ORDER OF THE COURT

DATED September 14, 2005

/s/
Jan Horbaly, Clerk

United States Court of Appeals for the Federal Circuit

03-1092

RON NYSTROM,

Plaintiff-Appellant,

v.

TREX COMPANY, INC. and TREX COMPANY, LLC,

Defendants-Appellees.

DECIDED: June 28, 2004

[ENTERED: June 28, 2004]

Before MAYER, Chief Judge, GAJARSA, and LINN, Circuit Judges.

Opinion for the court filed by Circuit Judge LINN. Opinion dissenting-in-part filed by Circuit Judge GAJARSA.

LINN, Circuit Judge.

Ron Nystrom ("Nystrom") appeals from the grant of summary judgment of non-infringement of claims 1-15 and of invalidity of claims 18-20 of his U.S. Patent No. 5,474,831 ("the '831 patent") and from an order denying sanctions under 28 U.S.C. § 1927, entered by the United States District Court for the Eastern District of Virginia in favor of defendants TREX Company, Inc. and TREX Company, LLC (collectively "TREX"). Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Oct. 25, 2002) (original final judgment); Nystrom v. TREX Co., Inc., No.

2:01cv905 (E.D. Va. Oct. 21, 2003) (amended final judgment). Because the district court erroneously construed certain claim limitations and erred in not properly applying our precedent relating to invalidity, we reverse the district court's summary judgments of non-infringement and invalidity and remand the case to the district court for further proceedings. Further, because the district court did not abuse its discretion in denying Nystrom's motion for sanctions under 28 U.S.C. § 1927, we affirm the district court's disposition of that motion.

I. BACKGROUND

A. The '831 Patent

The '831 patent is directed to construction material for use in flooring surfaces; specifically, boards for use in constructing an exterior floor, such as a deck. '831 patent, col. 1, II. 6-8. The invention described and claimed in the patent is an exterior wood flooring board shaped to shed water from its upper surface while at the same time providing a surface on which it is comfortable to walk and stand. Id. at col. 2, II. 8-11. In the Summary of Invention, the patent describes the invention as "a decking board which is shaped to shed water from its upper surface, and which also yields a superior product when cut from a log, reducing the amount of scrap in the outermost boards cut from a log." Id. at col. 2, II. 20-24. Figure 2, reproduced below, provides a transverse sectional view of the preferred embodiment of the invention:

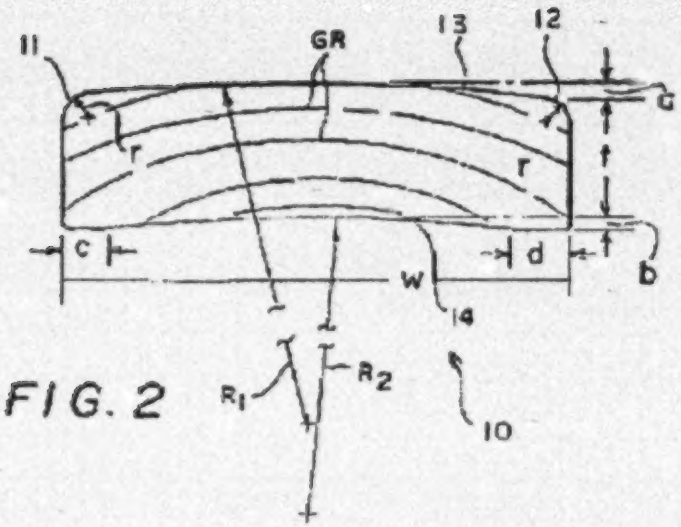

FIG. 2

Id. at col. 2, II. 49-50. The embodiment depicted in Figure 2 is described in the '831 patent specification as follows:

> The board specifically shown and described herein has generally the size and shape of a so-called 5/4 decking board, with rounded top side edges **11** and **12** each having a radius of curvature r of about one-quarter of an inch. The board **10** differs slightly in width w and thickness t from a standard decking board, however, in that it has a width of only about 5 inches and a thickness of about 1-3/8 inches.
>
> More importantly, the board of the invention has a slightly rounded upper surface **13** that slopes gradually off to either side of the center of the board, defining a convex surface that promotes the running off of water. This surface may have a radius of curvature R_1, for example, of about 24 inches.

> Further, in a preferred construction the board also has a complementally shaped concave bottom surface **14** with a radius of curvature R_2 of about 24 inches, placed to leave two relatively flat side panels c and d along opposite edges of the board.
>
> The curved top surface has a total fall or drop a from the center to each side edge of about 1/8 of an inch, and the curved bottom surface similarly has a total recess b from the plane of the two side panels to the deepest part at the center of the board of about 1/8 of an inch.

Id. at col. 3, II.1-24.

Independent claim 1 contains all of the disputed claim terms, and provides (with the disputed terms highlighted):

> 1. A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite side edges, said top surface being manufactured to have a slightly rounded or curved configuration from a longitudinal center line thereof downwardly toward each side edge, thereby defining a convex top surface which sheds water and at the same time is comfortable to walk on, and said bottom surface having a concave configuration for nesting engagement with the top surface of another board so that a plurality of the boards may be stacked one on top of the other with the stability of

> conventional boards having flat top and bottom surfaces.

Id. at col. 4, II. 19-30 (emphases added).

Independent claim 18 is representative of the claims for which invalidity is disputed, and provides (with the disputed limitation highlighted):

> 18. A decking board for use in constructing a flooring surface for exterior use, said board having a convex top surface, a bottom surface and opposite side edges; said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, defining a difference in thickness between the longitudinal centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40; and said convex top surface serving to shed water from said board when exposed to weather, and at the same time, when a plurality of said boards are laid in side-by-side relationship, presenting a surface that is comfortable to stand and walk on.

Id. at col. 6, II. 16-29 (emphasis added).

B. Proceedings Below

Nystrom is the inventor and sole owner of the '831 patent. He is a working carpenter and the owner of a two-truck, two-employee lumberyard. He has been in the business of building exterior decks for twenty-five years. TREX is a manufacturer of exterior decking planks made

from composites of wood fibers and recycled plastic. On December 5, 2001, Nystrom filed suit in the Eastern District of Virginia, alleging TREX infringed the '831 patent. TREX counterclaimed, seeking a declaratory judgment of non-infringement, invalidity, and unenforceability, and alleging antitrust violations on the part of Nystrom, his company, and his attorneys. Nystrom then filed a motion to dismiss the antitrust counterclaims. In response, TREX voluntarily dismissed the antitrust counterclaims, but then filed an amended antitrust counterclaim alleging many of the same antitrust violations against Nystrom alone. Soon after the amended counterclaim was filed, TREX dismissed its amended antitrust counterclaim, prompting Nystrom to move for sanctions on the ground that TREX's attorneys "multiplied] the proceedings...unreasonably and vexatiously." 28 U.S.C. § 1927 (2000). The district court denied the motion for sanctions under § 1927. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. July 2, 2002) ("Sanctions Order").

In due course, the district court held a Markman hearing and issued a claim construction ruling concerning three disputed claim terms of the '831 patent. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Aug 19, 2002) ("Claim Construction Order"). Based on the district court's claim construction ruling, Nystrom conceded that he could not prove his infringement case against TREX. Therefore, Nystrom asked the district court to enter judgment of non-infringement in favor of TREX and to dismiss TREX's invalidity and unenforceability counterclaims without prejudice. TREX then moved for summary judgment of non-infringement and for summary judgment of invalidity of claims 18-20. The district court entered judgment of non-infringement of all claims and deferred ruling on the outstanding motion regarding claims 18-20. Nystrom v. TREX Co., Inc., No. 2:01cv905 (E.D. Va. Sep. 11, 2002). Subsequently, the district court

granted TREX's motion for summary judgment of invalidity of claims 18-20. Nystrom v. TREX Co., Inc., No. 2:01cv905 (ED. Va. Oct. 17, 2002) ("Invalidity Order") On October 25, 2002, the district court entered its initial final judgment. In that judgment, the invalidity and unenforceability counterclaims regarding claims 1-17 were stayed pending appeal.

Nystrom appealed the claim construction rulings, the grant of summary judgment of non-infringement based thereon, the grant of summary judgment of invalidity of claims 18-20, and the district court's denial of sanctions to this court. On August 8, 2003, we dismissed Nystrom's appeal for lack of finality in light of the stayed invalidity and unenforceability counterclaims regarding claims 1-17. Nystrom v. TREX Co., Inc., 339 F.3d 1347 (Fed. Cir. 2003). Following the entry by the district court on October 21, 2003 of an Amended Final Judgment nunc pro tunc October 25, 2002 that repeated the previously entered judgments of non-infringement and of invalidity of claims 18-20 and dismissed without prejudice the remainder of TREX's declaratory judgment counterclaims regarding claims 1-17, we reinstated the appeal. Nystrom v. TREX Co., Inc., 83 Fed. Appx. 321, 322. (Fed. Cir. 2003).

We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) and address the merits of Nystrom's appeal in this opinion.

II. DISCUSSION

A. Standard of Review

"We review the grant of summary judgment de novo, drawing all reasonable inferences in favor of the non-moving party." Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1323 (Fed. Cir. 2002) (citing Anderson v.

Liberty Lobby, Inc., 477 U.S. 242, 255 (1986)). Summary judgment is only appropriate if there are no genuine issues of material fact and the movant is entitled to judgment as a matter of law. SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1116 (Fed. Cir. 1985) (en banc).

Claim construction is a question of law reviewed de novo. Ferguson Beauregard v. Mega Sys., Inc., 350 F.3d 1327, 1338 (Fed. Cir. 2003). Infringement, whether literal or under the doctrine of equivalents, is a question of fact. Id.

This court reviews a district court's denial of a motion for sanctions under 28 U.S.C. § 1927 pursuant to the law of the regional circuit. See Phonometrics, Inc. v. Westin Hotel Co., 350 F.3d 1242, 1246 (Fed. Cir. 2003). The Fourth Circuit reviews the denial of sanctions pursuant to § 1927 for an abuse of discretion. Chaudhry v. Gallerizzo, 174 F.3d 394, 410 (4th Cir. 1999).

B. Claim Construction

Nystrom argues that the district court misconstrued three patent claim limitations: "board," "manufactured to have," and "convex top surface." TREX responds that the district court's claim constructions were correct.

1. "Board"

The district court construed the word "board" in independent claim 1 to mean a "piece of elongated construction material made from wood cut from a log." Claim Construction Order, slip op. at 9. The district court found that Nystrom had limited the scope of the claim term "board" by statements in the specification that a board is cut or obtained from a log, id. at 7 (citing '831

patent, col. 2, II. 22-23; id. col. 2, I. 34), and statements made by Nystrom during prosecution in arguing against an obviousness rejection, id. at 8.

Nystrom argues that "board" in claim 1 is not limited to conventional wood boards that are cut from a log. He argues that the claim language "board" does not contain a description of the material from which the board is composed and the claim should not be so limited. He contends it was error for the district court to rely on statements in the specification to limit the claim because those statements do not represent a clear disavowal of claim scope. Moreover, Nystrom asserts that there was no disavowal in the prosecution history, because his comment in response to an obviousness rejection was not intended to limit but to establish that the resin tiles disclosed in the Yoshida reference were not properly combined with the wood planks of the Zagelmeyer reference in the examiner's § 103 obviousness rejection. Thus, Nystrom argues, the comment was not such a clear and unambiguous disclaimer as to justify limiting the claim term.

TREX responds that the ordinary meaning of "board" is a piece of sawn lumber. Because the specification only disclosed a board as made of wood and cut from a log, TREX contends that the claim term "board" must be limited to wood boards cut from a log. TREX further argues that Nystrom disclaimed non-wood boards by the statements he made during prosecution in overcoming an obviousness rejection based on Yoshida and Zagelmeyer.

We begin our claim construction analysis with the words of the claim. See Vitronics Corp. v. Conceptrionic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves.

Ferguson Beauregard, 350 F.3d at 1338. "In the absence of an express intent to impart a novel meaning to claim terms, an inventor's claim terms take on their ordinary meaning...[T]he ordinary meaning must be determined from the standpoint of a person of ordinary skill in the relevant art." Teleflex, 299 F.3d at 1325. The ordinary and customary meaning may be determined by reviewing a variety of sources, including the claims themselves; dictionaries and treatises; and the written description, drawings, and prosecution history. Ferguson Beauregard, 350 F.3d at 1338. The ordinary and customary definition will be overcome if the patentee has acted as his or her own lexicographer in explicitly setting forth a definition of a claim term distinct from its ordinary meaning or if "the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." Tex. Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1204 (Fed. Cir. 2002).[1]

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[1] The dissent eschews dictionaries in the search for the ordinary and customary meaning of the words used in the claims and criticizes the majority for "fail[ing] to recognize that the written description and the prosecution history clearly prescribe that the decking board of the invention is derived from a wood log." Post at 2. With all due respect, the dissent places undue emphasis on the written description and prosecution history, overshadowing the fact that by statute the focus is centered on the words of the claims. As we explained in SRI International v. Matsushita Electric Corp.:

> If everything in the specification were required to be read into the claims, or if structural claims were to be limited to devices operated precisely as a specification-described embodiment is operated, there would be no need for claims. Nor could an applicant, regardless of the prior art, claim more broadly than that embodiment. Nor would a basis remain for the statutory necessity that an applicant conclude his specification with "claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. It is the claims that measure the invention.

775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc) (plurality opinion).

While some dictionaries define "board" solely in reference to its material composition, see Webster's Third International Dictionary 243 (2002) (defining "board" as "a piece of sawed lumber of little thickness but considerable surface area usu. being rectangular and of a length generally exceeding its width"), not all dictionaries are so constrained. For example, the American Heritage Dictionary of the English Language 203 (4th ed. 2000) defines "board" as "1. A long flat slab of sawed lumber; a plank. 2. A flat piece of wood or similarly rigid material adapted for a special use." These definitions show that the ordinary meaning of the word "board" encompasses both a piece of cut wood or sawn timber and a similarly-shaped item made of a rigid material.[2]

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[2] The dissent claims that this approach is contrary to the holding in Novartis Pharmaceuticals Corp. v. Eon Labs Manufacturing, Inc., 363 F.3d 1306 (Fed. Cir. 2004). Post at 2. The dissent states that: "In Novartis, we held that when the dictionary definition 'yields a range of possible meanings consisting of two competing definitions,' we look to intrinsic evidence 'to determine as a matter of claim interpretation which of the available relevant definitions should be applied to the claim term at issue.'" Post at 2 (citing Novartis, 363 F.3d at 1309-10).

The dissent overlooks our prior precedent, which holds that claim terms may be construed to encompass all dictionary definitions not inconsistent with the intrinsic record. See, e.g., Tex. Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1203 (Fed. Cir. 2002) ("If more than one dictionary definition is consistent with the use of the words in the intrinsic record, the claim terms may be construed to encompass all such consistent meanings."); Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1378-79 (Fed. Cir. 2002) ("Here there are two possibly pertinent definitions...In such situations, a word that has an ordinary meaning encompassing two relevant alternatives may be construed to encompass both alternatives.").

"This court has adopted the rule that prior decisions of a panel of the court are binding precedent on subsequent panels unless and until overturned in banc. Where there is direct conflict, the precedential decision is the first." Newell Cos. v. Kenney Mfg. Co., 864 F.2d 757, 765 (Fed. Cir. 1988) (citing UMC Elecs. Co. v. United States, 816 F.2d 647, 652 n.6 (Fed. Cir. 1987)).

An examination of the written description and other claims of the '831 patent reveals that Nystrom did not disclaim boards made from materials other than logs. Indeed, in the written description, Nystrom described the invention as "a decking board which is shaped to shed water from its upper surface, and which also yields a superior product when cut from a log ...." '831 patent, col. 2, II. 20-23 (emphasis added). The fact that the written description expressly recognizes that the decking board of the invention is "a superior product when cut from a log" implicitly recognizes that the decking board of the invention may be made of other rigid materials as well. This is consistent with the ordinary and customary meaning and supports a broader construction than that adopted by the district court. Moreover, the claims of the '831 patent reveal that if Nystrom had intended "board" to include only boards made from wood or cut from a log, he could easily have formulated his claim in such a manner. Claim 16, which is similar to claim 1, covers "[a] wood decking board for use in constructing a flooring surface for exterior use, said decking board having a convex top surface, a bottom surface, opposite side edges, and curved growth rings...." Id. at col. 5, II. 32-35 (emphases added). By contrast, claim 1 simply claims a "board," without restricting the term to a particular material or describing characteristics of wooden boards cut from logs. See id. at col. 4, II. 19-21 ("A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite side edges...." (emphases added)).

We also consider the prosecution history, to determine whether the "patentee intended to deviate from a term's ordinary and customary meaning or that the patentee disclaimed or disavowed subject matter, narrowing the scope of the claim terms." ACTV, Inc. v. Walt Disney Co., 346 F.3d 1082, 1091 (Fed. Cir. 2003). See also Arlington Indus., Inc. v. Bridgeport Fittings,

Inc., 345 F.3d 1318, 1328 (Fed. Cir. 2003) ("In the course of prosecuting a patent application, a patentee may redefine a claim term.... [or] [a]n amendment or argument made in the course of prosecution may also serve as a disclaimer of a particular interpretation of a claim term."). In successfully overcoming a rejection based on the combination of a reference to Yoshida, which disclosed a plastic tile with curved upper and lower surfaces, and a reference to Zagelmeyer, which disclosed a wood board, Nystrom argued:

> ZAGELMEYER... is not believed to teach the basic premises of applicant's invention, including either the specially shaped top surface or the shaped bottom surface. YOSIDA [sic] discloses a floor covering tile made from synthetic resin sheets. He laminates his tile in a particular way so that it is curved up in the middle and down at all four edges. When laid, his tile rests flat on the supporting surface and does not have either a curved top surface or a curved bottom surface. YOSIDA is clearly not concerned with materials made from wood, and especially an elongate [sic] board for exterior use having a convex top surface when installed that will shed water and at the same time provide a surface that is suitable for supporting furniture and comfortable to walk on. There is no suggestion in this patent of providing space between stacked boards or under boards installed on a support structure for circulation of air to promote uniform drying of the boards. Consequently, it [is, sic] not believed that it would be obvious within the context of 35 U.S.C. § 103 to modify

> ZAGELMEYER in view of YOSIDA in order to arrive at the claimed invention.

Amendment rec'd Sept. 30, 1993, at 4 (emphasis added). TREX contends that Nystrom's argument disclaimed boards that were not made from wood cut from a log. We read Nystrom's statement that "YOSIDA [sic] is clearly not concerned with materials made from wood" not as a disavowal or disclaimer that Nystrom's claimed invention is limited to wood decking boards, but as an argument against the examiner's obviousness rejection. Nystrom argued that because the Yoshida and Zagelmeyer references disclosed inventions made of different materials and were in different arts—respectively, resin floor coverings and wood floor coverings—there was no reason, motivation, or suggestion to combine the references in a way that rendered the claimed invention obvious. See id. ("Consequently, it [is, sic] not believed that it would be obvious within the context of 35 U.S.C. § 103 to modify ZAGELMEYER in view of YOSIDA in order to arrive at the claimed invention."). Nystrom's statement is insufficient to restrict the scope of his claims.

We conclude that the district court erred in its claim construction of the term "board." Giving the term the full range of its ordinary and customary meaning, consistent with the written description and prosecution history, we construe the word "board" as used in claim 1 and its dependent claims, to mean an elongated, flat piece of wood or other rigid material.

2. "Manufactured To Have"

The district court construed the expression "manufactured to have" as used in claim 1 of the '831 patent to be "a manufacturing process utilizing woodworking techniques." Claim Construction Order, slip

op. at 11. The district court relied on statements in the '831 patent specification that "the advantages of the invention" were achieved through "cutting or milling and the like." Id. at 10. The district court found this statement in the specification, combined with its prior construction of the claim term "board" to be "construction material made from wood cut from a log," to be tantamount to a redefinition of the scope of the claimed manufacturing process. Id. at 11.

Nystrom argues that for many of the same reasons the district court erred in construing the word "board," the district court's construction of the phrase "manufactured to have" is also in error. Further, he argues the district court's reliance on language in the specification mentioning "cutting or milling or the like" impermissibly reads a limitation from a preferred embodiment into the claim. TREX responds that the district court properly relied on the reference to "cutting or milling and the like" in restricting "manufactured to have" in all of the claims to solely woodworking techniques. TREX argues that the district court's construction makes sense because the '831 patent covers only wood materials.

In light of our prior construction of "board" as encompassing materials made not only from wood but from other rigid materials as well, we find no reason to limit the phrase "manufactured to have" in claim 1 to woodworking techniques. The district court itself acknowledged that the "cutting or milling and the like" language in the specification that informed its construction was "an example of the preferred embodiment of the manufacturing process [Nystrom] envisions." Construction Order, slip op. at 10. See also Arlington Indus., 345 F.3d at 1327 (noting that we have consistently warned against importing limitations from preferred embodiments to restrict the ordinary meaning

of a patent claim term). As used in the claim, "manufactured to have" in claim 1 of the '831 patent and the claims dependent therefrom means that the convex top surface is shaped by manufacturing. This claim limitation means exactly what it says, and the district court erred in limiting it to the manufacturing steps used to shape wood.

3. "Convex Top Surface"

The district court construed "convex top surface" to mean "an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between 4:1 to 6:1." Claim Construction Order, slip op. at 13. It noted that "the specification does not contain any indication that the term convex top surface is to be assigned a specific range of curvature." Id. at 12. The district court relied on statements the applicant made in the prosecution history that "the preferred [radius of curvature] ration [sic, ratio] is about 5:1." Id. at 13.

Nystrom argues that the district court erred by ignoring the ordinary and customary meaning of this claim term, which is "an upper surface with an outward curve," and by importing additional limitations into this claim term from the specification. He observes that claim 1 does not provide an explicit radius of curvature ratio, and that such radii measurements are recited only in dependent claims 3, 7, and 13. Nystrom also argues that the district court erred in finding that he restricted the term to a specific radius of curvature to overcome a rejection based on the Zagelmeyer reference. He thus contends it was error for the court to construe "convex top surface" to include a specific radius of curvature ratio. TREX responds that the district court properly held that Nystrom limited his claim to a particular radius of curvature in the range of 4:1 to 6:1 to distinguish the invention over the prior art Zagelmeyer reference.

The dictionary definition of the claim term "convex" is "having a surface or boundary that curves or bulges outward, as the exterior of a sphere." American Heritage Dictionary of the English Language 402 (4th ed. 2000). This is consistent with the specification of the '831 patent. See, e.g., '831 patent, col. 3, ll. 10-14 ("More importantly, the board of the invention has a slightly rounded upper surface 13 that slopes gradually off to either side of the center of the board, defining a convex surface that promotes the running off of water. This surface may have a radius of curvature R_1 (for example, of about 24 inches."). The district court relied on statements Nystrom made during prosecution to distinguish the Zagelmeyer reference as limiting the expression "convex top surface" to a surface with a radius of curvature in the range of 4:1 to 6:1. Claim Construction Order, slip op. at 12-13. Nystrom stated in a supplemental amendment amending claim 16 of the issued patent (referred to as claim 19 during prosecution):

> Applicant then began trying different radiuses of curvature, but some were too shallow and when the board tried it tended not to shed water. Others had too short a radius of curvature and a distinct sensation of an uneven surface. Eventually, by trying a variety of curvatures, applicant discovered that a ratio of radius of curvature to width of the board of about 5:1 produced the desired result, i.e., it shed water and did not produce and uneven sensation to someone standing on it.
>
> * * *
>
> Claim 19 [claim 16 in the issued patent] and the claims dependent therefrom (the remaining claims have been previously allowed), are directed to a decking board that has a particular configuration which

> produces specific results not achieved with any of the prior art.... It should be noted, however, that the ratio of the radius of curvature of a board to its width can vary within certain relatively narrow limits, e.g. from about 4:1 to about 6:1, and still meet the basic objectives of the invention, although the preferred ratio is about 5:1. Anything much outside this range does not provide satisfactory performance and/or is not acceptable to the consumer.

Supplemental Amendment, Sep. 7, 1994, at 2-3 (emphasis added). The district court noted that Nystrom's statement that "[a]nything much outside this range ... is not acceptable" implied that his statements regarding the radius of curvature ratio applied to the entire patent, and was not intended to apply solely to issued claim 16.

The district court erred in its analysis of the prosecution history. Nystrom's statements were expressly directed to issued claim 16. There is no indication that Nystrom intended the term "convex top surface" in all of the pending patent claims to be limited to a specific radius of curvature ratio. The district court ignored the fact that the language of claim 16 at the time Nystrom made the disputed statements included the following claim language expressly providing for a radius of curvature ratio of approximately 5:1: "said top surface having a radius of curvature that is approximately five times as great as the width of the board, thereby defining a smoothly shaped and shallow convex top surface that sheds water...." Supplemental Amendment, Sep. 7, 1994, at 1 (emphasis added).

Other statements in the prosecution history support this view. Nystrom points to the examiner's prior rejection of claims 1, 2, 5, 6, 11 and 12 under 35 U.S.C. §

102(b): "This rejection is being made over the broad claims since they fail to specify any particular degree for the curve of the board." Examiner's Action, Mar. 24, 1994, at 2. The examiner eventually allowed claims 1-14 and 18 because the "prior art fail[ed] to teach both sides of the board with a curved configuration," not because the invented board specified a particular radius of curvature ratio. Examiner's Action, Dec. 8, 1994, at 4. The prosecution history did not redefine or disclaim "convex top surface" in claim 1 to be limited to a particular radius of curvature ratio. Accordingly, we hold that the correct construction of the expression "convex top surface" as used in claim 1 is the ordinary and customary meaning of an upper surface that curves or bulges outward, as the exterior of a sphere.

In light of the foregoing revised claim constructions of the claim terms "board," "manufactured to have," and "convex top surface" as used in claim 1 of the '831 patent and claims dependent therefrom, the district court's grant of summary judgment of non-infringement cannot stand and is hereby reversed.

C. Invalidity

The district court granted summary judgment in favor of TREX, holding claims 18-20 of the '831 patent invalid as anticipated in light of the Zagelmeyer reference. The parties principally dispute whether Figure 3 of the Zagelmeyer patent anticipates the following limitation of independent claim 18:

> said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, defining a difference in thickness between the longitudinal

> centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40....

'831 patent, col. 6, ll. 18-25 (emphasis added). The district court held that boards 2, 3, and 5 depicted in Figure 3 of the Zagelmeyer patent anticipate this limitation by illustrating a board with a convex top having a relevant thickness ratio to the width of the board of 1:39, 1:39, and 1:37, respectively. Invalidity Order, slip op. at 6. The district court found that our precedents in Hockerson-Halberstadt, Inc. v. Avia Group International, Inc., 222 F.3d 951 (Fed. Cir. 2000), and In re Wright, 569 F.2d 1124 (CCPA 1977), were not applicable, because it considered the correct inquiry to be whether a person of ordinary skill in the art would use measurements from the Zagelmeyer reference to ascertain the degree of curvature. Invalidity Order, slip op. at 6-7. Finding that a person of skill in the art would take such measurements from the boards depicted in Figure 3 of the Zagelmeyer patent, the district court found claim 18 and the associated dependent claims anticipated. Id. at 7.

Nystrom argues that the district court erred by basing its invalidity determination not on the disclosure of the Zagelmeyer patent itself, but instead from renderings made by a TREX employee of hypothetical boards based on the perspective drawings in the Zagelmeyer patent. He argues this violates our precedent in Hockerson-Halberstadt that "patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." Hockerson-Halberstadt, 222 F.3d at 956 (citing In re Wright, 569 F.2d at 1127). Nystrom contends that the district court erred in relying on extrinsic evidence in invalidating the '831 patent. The invalidity data relied on

by the district court was generated by a TREX employee who made a software model of the boards depicted in the perspective drawings of Figure 3 of Zagelmeyer patent, then performed computations on the modeled boards to come up with the allegedly invalidating curvature to width ratio.

TREX responds that the district court correctly found that it had presented evidence that persons of ordinary skill in the art would understand Zagelmeyer to disclose the same dimensions as claims 18-20. TREX submitted declarations that it contended detailed the process by which the boards depicted in the Zagelmeyer reference were modeled and from which the invalidating measurements were taken.

"A party seeking to establish that particular claims are invalid must overcome the presumption of validity in 35 U.S.C. § 282 by clear and convincing evidence." State Contracting & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1067 (Fed. Cir. 2003). A patent is invalid as anticipated if every limitation in a claim is found in a single prior art reference. Teleflex, 299 F.3d at 1335.

The district court erred in not properly applying the principles set forth in our prior precedents that arguments based on drawings not explicitly made to scale in issued patents are unavailing. Hockerson-Halberstadt indicated our disfavor in reading precise proportions into patent drawings which do not expressly provide such proportions:

> The '792 patent is devoid of any indication that the proportions of the groove and fins are drawn to scale. [The patent owner's] argument thus hinges on an inference drawn from certain figures about the

> quantitative relationship between the respective widths of the groove and fins. Under our precedent, however, it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.

Hockerson-Halberstadt, 222 F.3d at 956 (citing In re Wright, 569 F.2d at 1127). In re Wright similarly noted:

> We disagree with the [PTO]'s conclusion, reached by a comparison of the relative dimensions of appellant's and [the] Bauer [references]'s drawing figures, that Bauer "clearly points to the use of a chime length of roughly 1/2 to 1 inch for a whiskey barrel." This ignores the fact that Bauer does not disclose that his drawings are to scale. Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value.

569 F.2d at 1127.

The district court's acceptance of TREX's invalidity arguments based on models made from drawings contained in the Zagelmeyer patent was incorrect. The basis of the district court's summary judgment of invalidity was a model that TREX developed based on that reference, and not on drawing dimensions or a written disclosure of dimensions contained directly in the patent itself. Under the principles set forth in our prior cases, the speculative modeling premised on unstated assumptions in prior art patent drawings cannot be the basis for challenging the validity of claims

reciting specific dimensions not disclosed directly in such prior art. Thus, we conclude that the district court erred in granting summary judgment of invalidity based on TREX's models.

Because the district court erred in determining invalidity based on evidence improperly derived from a patent drawing, we need not address Nystrom's argument based on the district court's rejection of Nystrom's declaration. For the reasons stated, we reverse the district court's summary judgment of invalidity of claims 18-20 of the '831 patent as anticipated by Zagelmeyer.

D. Sanctions

Section 1927, in Title 28 of the United States Code, imposes liability on counsel for excessive costs, and provides:

> Any attorney or other person admitted to conduct cases in any court of the United States or any Territory thereof who so multiplies the proceedings in any case unreasonably and vexatiously may be required by the court to satisfy personally the excess costs, expenses, and attorneys' fees reasonably incurred because of such conduct.

28 U.S.C. § 1927 (2000). The Supreme Court has explained that § 1927 "is indifferent to the equities of a dispute and to the values advanced by the substantive law. It is concerned only with limiting the abuse of court processes." Roadway Express, Inc. v. Piper, 447 U.S. 752, 762 (1980).

Under the law of the Fourth Circuit, the district court's decision denying of sanctions pursuant to 28

U.S.C. § 1927 is reviewed for an abuse of discretion. Chaudhry, 174 F.3d at 410. "A district court abuses its discretion if its conclusion is guided by erroneous legal principles, or rests upon a clearly erroneous factual finding." Westberry v. Gislaved Gummi AB, 178 F.3d 257, 261 (4th Cir. 1999) (internal citation omitted). An appellate court "is obligated to review the record and reasons offered by the district court and to reverse if the court has a definite and firm conviction that the court below committed a clear error of judgment in the conclusion it reached upon a weighing of the relevant factors." Id. (internal quotation marks omitted). "[S]ection 1927 also requires a finding of counsel's bad faith as a precondition to the imposition of fees." Chaudhry, 174 F.3d at 411 n.14 (internal quotation marks omitted). The Fourth Circuit has further held "as a matter of law that the filing of a single complaint cannot be held to have multiplied the proceedings unreasonably and vexatiously and therefore that § 1927 cannot be employed to impose sanctions." DeBauche v. Trani, 191 F.3d 499, 511-12 (4th Cir. 1999).

TREX's counsel originally filed four antitrust counterclaims and a supporting brief in response to Nystrom's infringement complaint ("the original counterclaims"). TREX voluntarily dismissed these original counterclaims and then filed a second, amended antitrust counterclaim ("amended counterclaim"). TREX's counsel eventually dropped its original and amended counterclaims. Nystrom sought § 1927 sanctions against TREX. In light of DeBauche v. Trani, 191 F.3d 499, 511-12 (4th Cir. 1999), which held as a matter of law that the filing of a single complaint cannot multiply the proceedings unreasonably under § 1927, the district court limited its inquiry to whether TREX's filing of the amended counterclaim was a basis for sanctions in this case.

Nystrom argues that the district court erred in finding that TREX had pled all of the essential elements of an antitrust counterclaim in its amended counterclaim, because TREX failed to establish that Nystrom posed a dangerous probability of success in monopolizing the relevant market for composite decking. Nystrom argues that when TREX's counsel filed the amended counterclaim, it "knew as a matter of law" that Nystrom lacked market power in the composite decking market because TREX's counsel knew both that Nystrom was not a participant in that market and that the '831 patent itself did not create the required market power in that market. Appellant's Br. at 61-63.

TREX responds that it had ample evidentiary basis for its amended counterclaims, even though it admits its original counterclaims were flawed. TREX asserts that when the flaws in its original counterclaims were pointed out, its counsel immediately admitted the mistake and amended them. TREX argues that its counsel did not act in bad faith and that the district court did not abuse its discretion in denying § 1927 sanctions.

The district court declined to find that TREX acted in bad faith in alleging that Nystrom posed a dangerous probability of success in monopolizing the relevant market. Sanctions Order, slip op. at 7. Although Nystrom asserted to the district court that he operated solely in the market for milled decking material, TREX asserted that it relied on several statements by Nystrom during the prosecution of the '831 patent that he intended to monopolize both the milled and composite decking material markets. Id. at 6-7. Stating that it lacked sufficient evidence to limit TREX's supporting evidence to products only in the milled decking material market, the district court declined to find bad faith on the part of TREX and awarded § 1927 sanctions. Id. at 7.

Nystrom fails to establish how the district court's conclusion that it lacked sufficient evidence to find TREX acted in bad faith in filing its amended counterclaim constituted an abuse of discretion. From our review of the statements that TREX relied upon in its amended counterclaim, it is not clear which market Nystrom was referencing when he stated in the prosecution history that "licensing negotiations are presently underway with most major manufacturers and distributors of decking boards," Prelim. Amendment at 3, and the "product... has the potential of capturing a significant market share," Amendment rec'd Sept. 30, 1993, at 5. The district court's finding that these statements were not limited just to the milled decking material market was not clearly erroneous. The district court did not err in declining to find TREX acted in bad faith. Because there was no legal error or clearly erroneous factual finding underlying the district court's conclusion that Nystrom had failed to present sufficient evidence to justify the imposition of sanctions, see Westberry, 178 F.3d at 261, the court did not abuse its discretion in declining to award § 1927 sanctions.

CONCLUSION

Because the district court erred in its constructions of the claim terms "board," "manufactured to have," and "convex top surface," the district court's grant of summary judgment of non-infringement of claims 1-15 of the '831 patent is reversed. The district court's summary judgment of invalidity of claims 18-20 of the '831 patent as anticipated by the Zagelmeyer reference is also reversed. Because the district court did not abuse its discretion, we affirm the district court's refusal to award sanctions under 28 U.S.C. § 1927 in favor of Nystrom. The case is remanded for further proceedings consistent with this opinion.

AFFIRMED-IN-PART, REVERSED-IN-PART, AND REMANDED

COSTS

Costs are awarded to Nystrom.

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division

RON NYSTROM,

Plaintiff/Counterclaim-Defendant,

v. Civil Action No. 2:01cv905

TREX COMPANY, INC. and
TREX COMPANY, LLC,

Defendants/Counterclaim-Plaintiffs.

[ENTERED: October 17, 2002]

ORDER AND OPINION

Currently before the court is the defendants' Motion for Summary Judgment of Invalidity of Claims 18, 19, and 20, which this court deferred ruling on in its September 11, 2002 Order so that the parties could fully brief the issue. The issue, now fully briefed, is ripe for review. After examination of the briefs and record, this court determines oral argument is unnecessary because the facts and legal arguments are adequately presented, and the decisional process would not be significantly aided by oral argument. Thus, based on the briefs submitted by the parties and for the reasons set forth below, the court grants the defendants' Motion.

I. Factual and Procedural Background

On December 5, 2001, the plaintiff filed the instant lawsuit alleging patent infringement by the defendants of U.S. Patent No. 5,474,831 ("the '831 patent"). The '831 patent, which was issued to the

plaintiff on December 12, 1995, discloses a uniquely shaped board for use in constructing exterior flooring surfaces (such as outdoor decks, porches, docks, etc.) that has a slightly rounded or curved top surface that enables the board to shed water, and bottom surface with a concave configuration which allows multiple boards to stack easily. The defendants' product is a composite board, which is made from a mixture of cellulose fibers (usually sawdust) and plastic. These materials are mixed, heated, and extruded to produce a composite material board with a curved top and bottom. The defendants have refused to take a license of the plaintiffs patent in the past.

On August 1, 2002, the court conducted a Markman hearing to construe three terms in the '831 patent claims. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd, 517 U.S. 370. 116 S. Ct. 1384 (1996). The court issued an Order and Opinion construing these terms on August 19, 2002. Specifically, the court determined the term "board" to mean a piece of elongated construction material made from wood cut from a log; the term "manufactured to have" to mean a manufacturing process utilizing woodworking techniques; and the term "convex top surface" to mean an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between about 4:1 to 6:1. Based on these rulings, the court entered final judgment of non-infringement on September 11, 2002. However, even before this court issued its Markman Opinion, the defendants filed the instant Motion for Partial Summary Judgment on the grounds that claims 18, 19, and 20 of the '831 patent were invalid based on prior art. The defendants contend that these claims are invalid pursuant to 35 U.S.C. §§ 102 and 103, based on prior art including U.S. Patent No. 482,536 ("the Zagelmeyer patent") and the Sonoco product made

by Unity Forest Products.[1] The plaintiff disputes this assertion, and argues that summary judgment of non-invalidity of claims 18, 19, and 20 should be granted in his favor.

II. Analysis

A. Standard of Review

In patent cases, as well as in all other cases, summary judgment is appropriate when it is apparent from the entire record, viewed in light most favorable to the non-moving party, that there are no genuine disputes of material fact. See Clark v. Alexander, 85 F.3d 146, 150 (4th Cir. 1996); see also Celotex Corp. v. Catrett, 477 U.S. 317, 322-24, 106 S. Ct. 2548 (1986); United States v. Diebold, 369 U.S. 654, 655, 82 S. Ct. 993 (1962). When a court declines to grant summary judgment, sufficient evidence must exist favoring the nonmoving party which would allow a reasonable jury to return a verdict for that party. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250, 106 S. Ct. 2505 (1986).

A properly supported motion for summary judgment may not be defeated by "the mere existence of some alleged factual dispute between the parties." Id. at 247-48. The requirement is that there are no genuine issues of material fact. See id. Entry of summary judgment is mandated "against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Celotex, 477 U.S. at 322. Although an infringement analysis usually

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[1] In its Motion, the defendants also stated these claims were invalid based on Rivenite and TriMax products; however, it appears that based on the court's Markman decisions, the defendants have conceded that these are no longer invalidating prior art references.

involves both questions of fact and issues of law, summary judgment of noninfringement may still be proper. See Nike, Inc. v. Wolverine World Wide, Inc., 43 F.3d 644, 646 (Fed. Cir. 1994); Chemical Eng'g Corp. v. Essef Indus., Inc., 795 F.2d 1565, 1571 (Fed. Cir. 1986). A good faith dispute about the meaning and scope of asserted claims does not, in and of itself, create a genuine dispute to preclude summary judgment in patent cases. See Lantech, Inc. v. Keip Mach. Co., 32 F.3d 542, 546 (Fed. Cir. 1994).

All issued patents are presumed valid by statute. 35 U.S.C. § 282. This presumption of validity extends to all bases for challenging a patent's validity. See Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1570 (Fed. Cir. 1987). "When a patent has been examined and duly granted, judicial review must give due weight to the presumption of validity. The presumption of validity is based on the presumption of administrative correctness of actions of the agency charged with examination of patentability." Applied Materials, Inc. v. Advanced Semiconductor Materials Am., Inc., 98 F.3d 1563, 1569 (Fed. Cir. 1996) (citations omitted). However, "[t]he courts are the final arbiter of patent validity and, although courts may take cognizance of, and benefit from, the proceedings before the patent examiner, the question is ultimately for the courts to decide, without deference to the rulings of the patent examiner." Quad Envtl. Tech. Corp. v. Union Sanitary Dist., 946 F.2d 870, 876 (Fed. Cir. 1991). "The underlying determination of invalidity, however, must be predicated on facts established by clear and convincing evidence." Rockwell Int'l Corp. v. United States, 147 F.3d 1358, 1362 (Fed. Cir. 1998).

B. 35 U.S.C. § 102

Section 102(a) provides that "[a] person shall be entitled to a patent unless the invention was known or

used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for the patent." Id. at § 102(a). If a prior art reference meets this definition, then the court must determine whether the prior art teaches or anticipates the claims of the later patent. "Invalidity based upon lack of novelty (often called 'anticipation') requires that the same invention, including each element and limitation of the claims, was known or used by others before it was invented by the patentee." Oney v. Ratliff, 182 F.3d 893, 895 (Fed. Cir. 1999) (quotation omitted); see also Apple Computer, Inc. v. Articulate Sys., Inc., 234 F.3d 14, 20 (Fed. Cir. 2000) ("Anticipation under 35 U.S.C. § 102 requires the disclosure in a single piece of prior art each and every limitation of a claimed invention."); Union Oil Co. of Cal. v. Atlantic Richfield Co., 208 F.3d 989, 994-95 (Fed. Cir. 2000) (same). "Although anticipation is a question of fact, it still may be decided on summary judgment if the record reveals no genuine dispute of material fact." Oney, 182 F.3d at 895. Furthermore, "the [prior art] reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 30 F.3d 1475, 1479 (Fed. Cir. 1994). In order to prevail on anticipation, the defendant must prove its case by clear and convincing evidence. Union Oil, 208 F.3d at 995.

The first step is to determine if the prior art references cited by the defendants are in fact prior art. The Zagelmeyer patent is clearly prior art, as it was disclosed to the Patent Examiner during the prosecution of the '831 patent, and is listed as prior art on the '831 patent itself. As for the Sonoco product made by Unity Forest Products, the defendants have asserted that based on the fact that (1) the product was sold more than one year before the plaintiff invented the subject of the '831

patent; (2) the pattern for the Sonoco product board matches the range of ration of radius of curvature to width asserted in the '831 patent; and (3) that the product was cut or milled into the claimed shape. Based on the documentary evidence supporting the defendants' Motion, the court finds sufficient evidence that this product is also prior art. Therefore, the court must now determine whether the prior art anticipated each and every element of claims 18-20 of the '831 patent.

1. Claim 18

Claim 18, of which claims 19 and 20 are dependent, claims

> A decking board for use in constructing a flooring surface for exterior use, said board having a convex top surface, a bottom surface and opposite side edges; said convex top surface being manufactured to have a radius of curvature with a slightly rounded or curved configuration extending across the top surface from one side edge to the other, defining a difference in thickness between the longitudinal centerline and the opposite side edges, with the ratio of said difference in thickness to the width of the board being about 1:40; and said convex top surface serving to shed water from said board when exposed to weather, and at the same time, when a plurality of said boards are laid in side-by-side relationship, presenting a surface that is comfortable to stand and walk on.

'831 patent, col. 6, ll. 16-29. The defendants have broken this claim down limitation by limitation and have provided evidence to support their contention that both

prior art references anticipate all limitations in the claim. See Defs.' Mem., Dkt. 58, Exs. M and P. These charts, along with the supportive evidence in the form of expert declarations, reveal that when the boards of Figure 3 of the Zagelmeyer patent are measured, they fall within the range claimed by the plaintiff in claim 18 of the '831 patent. For example, the limitation "defining a difference in thickness between the longitudinal centerline and the opposite side edges, with a ratio of said difference in thickness to the width of the board being about 1:40," '831 patent, col. 6, II. 22-25, is anticipated by boards 2, 3, and 5 of Figure 3 of the Zagelmeyer patent which show a convex top that defines a difference of thickness between the longitudinal centerline and opposite side edges, with a ratio of said difference in thickness to the width of the board being 1:39, 1:39, and 1:37, respectively. The defendants argue that these ratios are "about 1:40" as required by the limitation in claim 18.

This court is aware that it is well established under Federal Circuit precedent that "patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." Hockerson-Halberstadt, Inc. v. Avia Group Intern., Inc., 222 F.3d 951, 956 (Fed. Cir. 2000); accord In re Wright, 569 F.2d 1124, 1127 (CCPA 1977) ("Absent any written description in the specification of quantitative values, arguments based on measurement of a drawing are of little value."). However, the question here is not whether the Zagelmeyer patent is limited to these measurements, it is whether one of ordinary skill in the art would use these measurements to ascertain the degree of curvature contemplated by the inventor. It is clear that one of ordinary skill in the art would take measurements of the boards in the drawings to have at least a starting point for creating the patented board; i.e., to enable the creation of these boards. Therefore, after careful review of

these measurements, the court finds that each and every limitation of claim [illegible] of the '831 patent is anticipated by the Zagelmeyer pa[illegible].

The plaintiff argues that Figure 3 of the Zagelmeyer is a diagonal cross-section of the boards, rather than a squared cross-section and therefore, the measurements taken by the defendant's experts are not accurate and cannot be used to invalidate the claim of the '831 patent. Furthermore, the plaintiff argues that Figure 3 is drawn to show cracks across the wood grain called "checking" which is indicative that the wood has warped into the shape. As a result, the plaintiff contends that this Figure does not reflect the curvature that the board was manufactured to have and thus, any measurements taken by the defendants are not accurate. However, the only evidence to support this contention that the plaintiff provided was a signed declaration from Mr. Nystrom, who is the plaintiff in this case and the inventor the '831 patent. He has not been qualified as an expert and states in his declaration that he is "familiar" with the various techniques used by the defendants' experts in ascertaining the measurements of the boards in the Zagelmeyer patent. Based on this familiarity, Mr. Nystrom has provided the court with his ultimate conclusions that the boards in Figure 3 are cut diagonally and not at right angles. The Federal Circuit has held that a plaintiffs affidavit "creates no genuine issue of fact [if] it is wholly conclusory and its conclusions are contrary to the clear disclosure of the drawings and the written description found in the ... patent." Chore-Time Equip., Inc. v. Cumberland Corp., 713 F.2d 774, 779 (Fed. Cir. 1983); see also May v. Dover Elevator Co., 845 F. Supp. 377, 380 (E.D. Va. 1994) ("In meeting this burden, the non-moving party 'must do more than simply show that there is some metaphysical doubt as to the material facts.'") (quoting Matsushita Elec. Indus. Corp. v. Zenith Radio Corp., 475 U.S. 574, 586, 106 S. Ct. 1438 (1986)).

The court agrees with the defendants in that the plaintiff has not offered any evidence to create a genuine issue of fact aside from Mr. Nystrom's conclusory statements. Therefore, the court finds in favor of the defendants and holds that claim 18 of the '831 patent are invalid as anticipated by the Zagelmeyer patent.[2]

Claims 19 and 20 are dependent on claim 18 and thus, are presumed valid even though they depend on an invalid claim. See Apple Computer, 234 F.3d at 24 (quoting 35 U.S.C. § 282 and Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 796 F.2d 443, 446 (Fed. Cir.1986)). Therefore, the court must address the additional limitations added by these dependent claims in order to determine whether they too are invalid.

2. Claim 19

Claim 19 adds the Limitation that "the convex top surface of the board has a radius of curvature that is about five times as great as the width of the board." '831 patent, col. 6, II. 30-33. The defendants argue that this limitation was also anticipated by the Zagelmeyer patent. Specifically, the defendants allege that boards 2 and 3 of Figure 3 have convex top surfaces that have a radius of curvature that is four times as great as the width of the boards and that four times is "about five times" as required by claim 19. The plaintiff has offered nothing over and above what has been discussed above to dispute these measurements. Therefore, based on this evidence, it appears to this court that the Zagelmeyer patent anticipated each and every additional element of claim 19. As such, claim 19 is invalid.

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[2] As this court has been able to rule that claim 18 is invalid based on the Zagelmeyer patent, it does not need to further address whether the Sonoco product by Unity Forest Products also invalidates the claim.

3. Claim 20

Claim 20, which is dependent on both claims 18 and 19, imports an additional limitation which states that "the board has a width of about five inches and a thickness of about one and three-eighths inches, and said radius of curvature is about twenty-five inches, resulting in a difference in thickness between the longitudinal centerline and the opposite side edge of about one-eighth of an inch." '831 patent, col. 6, ll. 35-40. The defendants contend that it would have been obvious to one of ordinary skill in the art that boards 2 and 3 of Figure 3 are smaller scale drawings of the actual boards to be used. Thus, when these boards are drawn to actual size, they would reveal a "5/4 decking board (5.5 by 1.25 inches) and a 2x6 decking board (5.5 by 1.5 inches)." Defs.' Mem., Dkt. 58, Ex. M. Both of these boards are "about five inches by one and three-eighths inches," as required by claim 20. Furthermore, claim 20 also requires a specific radius of curvature, which is present in boards 2, 3, and 5 of Figure 3. Specifically, each of these boards have a radius of curvature of 22, 22, and 21 inches, respectively, which is "about twenty five inches" as required. Finally, the defendants argue that the difference in thickness between the longitudinal centerline and the opposite side edges of these boards are 0.14, 0.14, and 0.15, respectively. Again, these measurements are "about one-eighth on an inch" as required by claim 20. Therefore, based on this evidence, and without contradictory evidence from the plaintiff, the court finds that claim 20 is likewise invalid pursuant to 35 U.S.C. § 102.[3]

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[3] Because the court has invalidated these claims pursuant to section 102, and because neither party has fully briefed this court on the obviousness theory of invalidity, the court declines to address whether the claims are also invalid based on obviousness under section 103.

C. Remaining Counterclaim

Both parties seek the remaining portion of the defendants' Counterclaim to be stayed pending the appeal of the Markman Opinion. The court agrees that this would be in the best interests of all involved in this matter. Therefore, the remaining declaratory judgment Counterclaim in this case is stayed pending the outcome of the appeal to the United States Court of Appeals for the Federal Circuit.

III. Conclusion

For the reasons stated above, the court **GRANTS** the defendants' Motion for Partial Summary Judgment on Invalidity of Claims 18, 19, and 20 of the '831 patent. The court **ENTERS** final judgment of invalidity as to claims 18, 19, and 20. The remainder of the defendants' Counterclaim seeking declaratory judgment of invalidity and unenforceability of the '831 patent is hereby **STAYED** pending appeal. The Clerk is **DIRECTED** to remove the case from the active docket.

The Clerk is **REQUESTED** to send a copy of this Order and Opinion to counsel of record.

It is so **ORDERED.**

/s/
UNITED STATES
DISTRICT JUDGE

Norfolk, Virginia
October 17, 2002

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division

RON NYSTROM,

Plaintiff/Counterclaim-Defendant,

v. Civil Action No. 2:01cv905

TREX COMPANY, INC. and
TREX COMPANY, LLC,

Defendants/Counterclaim-Plaintiffs.

[ENTERED: September 11, 2002]

ORDER AND OPINION

Currently before the court are a number of motions filed by the parties in response to this court's August 19, 2002 Order and Opinion regarding the August 1, 2002 Markman hearing. Ron Nystrom ("plaintiff") has filed a Motion for Final Order and Judgment, and Trex Co., Inc. and Trex Co., LLC ("defendants") have filed four Motions for Summary Judgment. Based on the briefs submitted by the parties, the court GRANTS in part and DENIES in part the plaintiff's Motion for Final Order and Judgment. Furthermore, the court GRANTS the defendants' Motion for Summary Judgment of Non-infringement and the defendants' Motion for Partial Summary Judgment of Non-infringement of Claims 16 and 17 (Growth Rings). The defendants' Motion for Partial Summary Judgment of Non-infringement of Claims 1-15 (Convex Top Surface, Nesting, and Stacking) is now moot as the court has already granted summary judgment of non-infringement on alternative grounds. Finally, the court defers its ruling on defendants' Motion

for Summary Judgment of Invalidity of Claims 18, 19, and 20 in order for the parties to fully brief the issue.

I. Factual and Procedural Background

On December 5, 2001, the plaintiff filed the instant lawsuit alleging patent infringement by the defendants of U.S. Patent No. 5,474,831 ("the '831 patent"). The '831 patent, which was issued to the plaintiff on December 12, 1995, discloses a uniquely shaped board for use in constructing exterior flooring surfaces (such as outdoor decks, porches, docks, etc.) that has a slightly rounded or curved top surface that enables the board to shed water, and bottom surface with a concave configuration which allows multiple boards to stack easily. The defendants' product is a composite board, which is made from a mixture of cellulose fibers (usually sawdust) and plastic. These materials are mixed, heated, and extruded to produce a composite material board with a curved top and bottom. The defendants have refused to take a license of the plaintiff's patent in the past.

On August 1, 2002, the court conducted a Markman hearing to construe three terms in the '831 Patent Claims. The court issued an Order and Opinion construing these terms on August 19, 2002. Specifically, the court determined the term "board" to mean a piece of elongated construction material made from wood cut from a log; the term "manufactured to have" to mean a manufacturing process utilizing woodworking techniques; and the term "convex top surface" to mean an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between about 4:1 to 6:1.

On August 23, 2002, the plaintiff filed a Motion for Final Order and Judgment asking the court to (1) enter

judgment in favor of the defendants and against the plaintiff on the Complaint for patent infringement; (2) dismiss without prejudice the defendants' Counterclaim seeking a declaratory judgment of invalidity, non-infringement, and unenforceability of the '831 patent; and (3) suspend all proceedings in connection with this litigation without prejudice. The defendants have also filed a number of Motions for Summary Judgment; specifically, a Motion for Partial Summary Judgment on Non-Infringement of Claims 16 and 17; Motion for Partial Summary Judgment on Invalidity of Claims 18, 19, and 20; Motion for Summary Judgment of Non-Infringement; and Motion for Partial Summary Judgment on Non-Infringement of Claims 1-15.

II. Analysis

In this court's Markman Order and Opinion, three terms were construed - board, manufactured to have, and convex top surface. Based on the court's construction of these terms, the defendants argue that it cannot infringe upon the '831 patent because their product does not meet every limitation in the claims; specifically that their product is not made from wood cut from a log nor do they use woodworking techniques to manufacture their product. The plaintiff agrees and has stated that based on the court's Markman Opinion, it cannot present a prima facie case of infringement. Therefore, the court grants the defendants' Motion for Partial Summary Judgment on Non-Infringement of Claims 16 and 17 and Motion for Summary Judgment of Non-Infringement.[1]

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[1] The defendants also seek summary judgment of non-infringement of claims 1-15 on alternative grounds; specifically that their boards do not have the required top and bottom surfaces to allow them to nest and stack. However, because the court has granted summary judgment of non-infringement based on alternative grounds and for the sake of judicial economy, the court deems this motion moot.

Based on this, the plaintiff seeks the court to enter judgment and dismiss without prejudice the defendants' Counterclaim for a declaratory judgment of invalidity. However, the court must first address whether the dismissal of the counterclaim is proper in this case. For many years, the Federal Circuit routinely vacated validity opinions from district courts after a finding of non-infringement. See Cardinal Chemical Co. v. Morton Int'l, Inc., 508 U.S. 83, 92 n.12, 113 S. Ct. 1967 (1993) (collecting Federal Circuit cases following this "uniform practice or rule"). However, in Cardinal Chemical, the Supreme Court rejected this practice of the Federal Circuit, holding that a finding of non-infringement alone does not justify vacating a validity determination. Id. at 102. The Court also stated that there may be "an unusual case [which] might justify [a] court's refusal to reach the merits of a validity determination." Id. The cases cited by the plaintiff, particularly Super Sack Mfg. Corp. v. Chase Packaging Corp., 57 F.3d 1054 (Fed. Cir. 1995), are not applicable in this situation as there remains an ongoing threat of potential infringement liability.

In this case, the defendants seek a determination of invalidity of claims 18, 19, and 20 based on prior art. The plaintiff objects to this court ruling on the issue at this time, arguing that the court should not waste time or money resolving this issue which may be rendered moot by the Federal Circuit. However, the plaintiff misses the mark here. There is an ongoing threat of potential infringement liability because the plaintiff has indicated its intention to appeal this court's Markman Order and Opinion. Moreover, the plaintiff has also refused to covenant not to sue the defendants for infringement if the Federal Circuit reverses this court's Opinion. Therefore, the defendants are entitled to a resolution of the validity issue in order to remove these claims as potential future infringement lawsuits.

In the plaintiff's response, it focused its opposition based on the above argument for dismissal of the defendants' Counterclaim. The plaintiff requested that if the court denied its request, that it be given a reasonable period of time to fully respond to the defendants' Motion. The court believes it would be aided in its decision on the defendants' Motion by the plaintiff's response, and therefore grants the plaintiff's request for more time to respond. Thus, the court ORDERS the plaintiff to respond to the defendants' Motion for Partial Summary Judgment on Invalidity of Claims 18, 19, and 20 within eleven (11) days of the date of this Order and Opinion. The defendants shall be given the opportunity to reply within three (3) days following the receipt of the plaintiff's response, in accordance with the time limits of the Local Rules.

III. Conclusion

For the reasons stated above, the court **GRANTS** the defendants' Motion for Partial Summary Judgment on Non-Infringement of Claims 16 and 17 and the defendants' Motion for Summary Judgment of Non-Infringement. The court deems the defendants' Motion for Partial Summary Judgment on Non-Infringement of Claims 1-15 moot. The court **GRANTS** the plaintiff's Motion for Entry of Judgment with respect to the entry of judgment of non-infringement, but **DENIES** the plaintiff's Motion for Entry of Judgment to the extent that the plaintiff requests the court to dismiss without prejudice the defendants' Counterclaim and suspend all proceedings without prejudice. The defendants' Motion for Partial Summary Judgment on Invalidity of Claims 18, 19, and 20 will be ruled upon once it has been fully briefed by the parties. The plaintiff is **ORDERED** to file its response brief within eleven (11) days of the entry of this Order and Opinion, and the defendants will be

permitted to reply within three (3) days following the receipt of the plaintiff's response.

The Clerk is **REQUESTED** to send a copy of this Order and Opinion to counsel of record.

It is so **ORDERED.**

/s/
UNITED STATES
DISTRICT JUDGE

Norfolk, Virginia
September 11, 2002

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division

RON NYSTROM,

Plaintiff/Counterclaim-Defendant,

v. Civil Action No. 2:01cv905

TREX COMPANY, INC. and
TREX COMPANY, LLC,

Defendants/Counterclaim-Plaintiffs.

[ENTERED: August 19, 2002]

ORDER AND OPINION

On August 1, 2002, the court conducted a Markman hearing for the purpose of construing the claims in the plaintiffs' patent. Based on the briefs submitted by the parties, the arguments of counsel at the hearing, and for the reasons set forth below, the court makes the following claim constructions: the term "Board" means apiece of elongated construction material made from wood cut from a log; the term "Manufactured to have" means a manufacturing process utilizing woodworking techniques; and the term "Convex top surface" means an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between about 4:1 to 6:1.

I. Factual and Procedural Background

On December 5, 2001, Ron Nystrom ("plaintiff") filed the instant lawsuit alleging patent infringement by Trex Co., Inc and Trex Co., LLC ("defendants") of U.S.

Patent No. 5,474,831 ("the '831 patent"). The '831 patent, which was issued to the plaintiff on December 12, 1995, discloses a uniquely shaped board for use in constructing exterior flooring surfaces (such as outdoor decks, porches, docks, etc.) that has a slightly rounded or curved top surface that enables the board to shed water, and bottom surface with a concave configuration which allows multiple boards to stack easily. The defendants' product is a composite board, which is made from a mixture of cellulose fibers (usually sawdust) and plastic. These materials are mixed, heated, and extruded to produce a composite material board with a curved top and bottom. The defendants have refused to take a license of the plaintiffs' patent in the past.

On April 29, 2002, the defendants filed a Motion for an Order Construing the '831 Patent Claims. Specifically, the defendants requested this court to construe three terms: "board," "manufactured to have," and "convex top surface." On May 13, 2002, the plaintiff filed a Motion Regarding Claim Construction. Timely responses were filed by both parties. The court heard oral argument on these motions on August 1, 2002.

II. Analysis

A. Standard of Review

The first step in a literal patent infringement case is claim construction, which is a matter of law. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995). "Claim interpretation begins with an examination of the intrinsic evidence, i.e., the claims, the rest of the specification and, if in evidence, the prosecution history." CCS Fitness v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002). "Courts may also use extrinsic evidence (e.g., expert testimony and

treatises) to resolve the scope and meaning of a claim term." Id.

1. Claims and Specification

"Generally there is a heavy presumption in favor of the ordinary meaning of the claim language as understood by one of ordinary skill in the art." Bell Atlantic Network Svcs., Inc. v. Covad Communications Group, Inc., 262 F.3d 1258, 1268 (Fed. Cir. 2001). However, this presumption may be overcome "where the patentee has chosen to be his own lexicographer or where a claim term deprives the claim of clarity such that there is no means by which the scope of the claim may be ascertained from the language used." Id. (quoting Johnson Worldwide Assoc., Inc. v. Zebco Corp., 175 F.3d 985, 990 (Fed. Cir. 1999)). This can occur when the inventor exhibits an express intent to impart a novel meaning to the claim terms in the specification or prosecution history. Id. Furthermore, the specification "can provide guidance as to the meaning of the claims, thereby dictating the manner in which the claims are to be construed, even if the guidance is not provided in explicit definitional format." Id. (quoting SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1344 (Fed. Cir. 2001)); see also Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("The specification acts as a dictionary when it expressly defines terms used in the claims... [and thus], it is the single best guide to the meaning of a disputed term."). Patent specifications often contain what are referred to as "preferred embodiments," which further serve to illustrate the claimed invention. Although the Court of Appeals for the Federal Circuit has held that claims should be read in view of the specification, see, e.g., Vitronics, 90 F.3d at 1582, the court has cautioned against artificially limiting the scope of a claim to the preferred embodiment. See e.g. Intervet America, Inc. v.

Kee-Vet Laboratories, Inc., 887 F.2d 1050, 1053 (Fed. Cir. 1989) ("interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification'"). In Wang Laboratories v. America Online, Inc., 197 F.3d 1377 (Fed. Cir. 1999), the Court of Appeals for the Federal Circuit addressed the scope of a court's reliance on "preferred embodiments" as part of the intrinsic evidence. In Wang, the plaintiff protested that the court's definition limited the claim to the preferred embodiment. Id. at 1382. The Federal Circuit replied:

> The usage "preferred" does not broaden the claims beyond their support in the specification.... The only embodiment described in the [patent] specification is the character-based protocol, and the claims were correctly interpreted as limited thereto.

Id. at 1383 (citations omitted); see also General Am. Transp. Corp. v. Cryo-Transp., Inc., 93 F.3d 766, 770 (Fed. Cir. 1996) ("This is not just the preferred embodiment of the invention; it is the only one described." (emphasis in original)); Modine M[illegible] Co. v. United States Int'l Trade Comm'n, 75 F.3d 1545, 1551 (Fed. Cir. 1996) (noting that when the "preferred embodiment" is described as the invention itself, the claims are not entitled to a broader scope than the embodiment); Autogiro Co. of Am. v. United States, 384 F.2d 391, 398 (Ct. Cl. 1967) ("where the patentee describes an embodiment as being the invention itself and not only one way of utilizing it," this description guides understanding the scope of the claims).

2. Prosecution History

After examining the claims in light of the specification, a court must review the prosecution history, if it has been entered into evidence.[1] "This history contains the complete record of all the proceedings before the Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims." Vitronics, 90 F.3d at 1582-83 (citing Southwall Tech., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995) ("The prosecution history limits the interpretation of the claim terms so as to exclude any interpretation that was disclaimed during prosecution.")). It is appropriate for the court to consider not only the changes made during prosecution, but also the reason for the changes. See Insta-Foam Prods., Inc. v. Universal Foam Sys., Inc., 906 F.2d 698, 703 (Fed. Cir. 1990) ("A close examination must be made as to not only what was surrendered, but also the reason for such a surrender."). Prosecution history "limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution." Southwall Tech., 54 F.3d 1 at 1576 (holding that statements made during the prosecution history may commit the applicant to a particular meaning for a patent term, which meaning is then binding in litigation).

3. Extrinsic Evidence

While a review of the intrinsic evidence will generally resolve any question regarding a disputed term, there are times when further information is needed. In those cases, a court may properly rely on extrinsic evidence in the form of expert opinions, treatises, etc. See

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[1] In this case, the defendants have attached the prosecution history to their motion and therefore, the court will use it in construing the claims.

Vitronics, 90 F.3d at 1583. However, "[i]n cases where the public record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper." Id. In Key Pharmaceuticals v. Hercon Labs. Corp., the Court of Appeals for the Federal Circuit noted that this "court has made strong cautionary statements on the proper use of extrinsic evidence," and further clarified that "[w]hat is disapproved of is an attempt to use extrinsic evidence to arrive at a claim construction that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent." 161 F.3d 709, 716 (Fed. Cir. 1998). The Federal Circuit aptly observed the rationale behind the exclusive reliance on intrinsic evidence in the absence of any ambiguities, stating that:

> [t]he claims, specification, and file history, rather than extrinsic evidence, constitute the public record of the patentee's claim, a record on which the public is entitled to rely. In other words, competitors are entitled to review the public record, apply the established rules of claim construction, ascertain the scope of the patentee's claimed invention and, thus, design around the claimed invention.... Allowing the public record to be altered or changed by extrinsic evidence introduced at trial, such as expert testimony, would make this right meaningless.

Vitronics, 90 F.3d at 1583 (citations omitted); see also Southwall Tech., 54 F.3d at 1578 ("A patentee may not proffer an interpretation for the purposes of litigation that would alter the indisputable record consisting of the

claims, the specification and the prosecution history, and treat the claims as a 'nose of wax.").

B. Claims Construction

1. Board

The defendants first argue that the term "board" means "wood board cut from a log." [2] The plaintiff, on the other hand, argues that the term "board" means "an elongated piece of construction material for use in building." Following the proper standard of review detailed above, the court first looks to the claims themselves.

Claim 1 reads as follows:

> A board for use in constructing a flooring surface for exterior use, said board having a top surface, a bottom surface and opposite side edges, said top surface being manufactured to have a slightly rounded or curved configuration from a longitudinal centerline thereof downwardly toward each side edge, thereby defining a convex top surface which sheds water and at the same time is comfortable to walk on, and said bottom surface having a concave configuration for nesting engagement with the top surface of another board so that a plurality of the boards may be stacked one on top of the other with the stability of conventional flat boards having flat top and bottom surfaces.

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[2] This was the definition offered at the Markman hearing. In their briefs, the defendants urged a proposed definition of a "solid all wood board."

'831 patent, col. 4, 11. 19-31. As stated above, there is a heavy presumption that the ordinary meaning of the term applies, unless the inventor has chosen to deviate from that meaning. See Bell Atlantic, 262 F.3d at 1268. Here, the plaintiff argues that in the context of this claim, the ordinary meaning of the term board is an elongated piece of construction material for use in building and that he has not done anything to permit the court to deviate from this ordinary meaning. The defendants, on the other hand, point to a number of places in the specification and prosecution history where the plaintiff has shown his intent to deviate from that ordinary meaning.

As an initial matter, the court notes that there is no special description of the material of which the board is composed. Rather, the claim details the shape of the board. However, when viewed in light of the specification, it is discovered that the inventor has limited the scope of the board to those made from wood. Specifically, the specification states in numerous places that the board is "cut from a log" and "obtained from a log." '831 patent, col. 2,11. 22-23; col. 2, 11. 34; see also col 2, 11. 1-6 ("[T]here is a need for an exterior decking board that... can result in better utilization of materials as the boards are cut from a log."). In addition, the drawings clearly show boards with growth rings and boards that are cut from a log. Id. at Figs. 1, 2, 4, and 5. These growth rings are also added as limitations to a number of claims, e.g., claims 16 and 17. Id. at col. 5, 1. 35. Furthermore, the background of the invention portion of the specification speaks almost entirely of wood flooring materials and the problems associated with using wood materials in external construction applications, such as warping and rotting. Id. at col. 1, 11. 16-67.

The plaintiff argues against this interpretation, stating that other claims of the '831 patent contain the

term "wood board" in order to narrow claim one. See e.g., claim 16 at col. 5, II. 32-33 ("A wood decking board for use in constructing a flooring surface for exterior use..."). The plaintiff argues that this violates the doctrine of claim differentiation. This doctrine states that "there is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant." The Toro Co. v. White Consol. Indus., 199 F.3d 1295, 1302 (Fed. Cir. 1999) (quoting Tandon Corp. v. United States Int'l Trade Comm'n, 831 F.2d 1017, 1023 (Fed. Cir. 1987)). However, as the defendants have pointed out, "the doctrine of claim differentiation does not serve to broaden the claims beyond their meaning in light of the specification, and does not override clear statements of scope in the specification and the prosecution history." Id. Since it appears that the specification only discloses a board made from wood, the plaintiff's argument is not persuasive.

Furthermore, when the court reviews the prosecution history in this case, it appears that the plaintiff made a number of disclosures which serve to further limit the scope of the term. First, in the plaintiffs September 30, 1993 Amendment filed with the Patent and Trademark Office ("PTO"), he states that "[t]he present invention represents a unique and significant advance in the art of exterior wood flooring." September 30, 1993 Amendment, p. 2. Second, in order to get around the examiner's obviousness rejection of his claims based on two pieces of prior art (Zagelmayer and Yoshida), the plaintiff stated that "Yoshida is clearly not concerned with materials made from wood." Id. at p. 4. While the plaintiff argues that this statement was made to show that one of ordinary skill in the art of wood planking

would not have considered a patent for resin tiles for the shape of the board, it is further support that the plaintiff intended his patent to cover wood boards. "[A] claim term will not carry its ordinary meaning if the intrinsic evidence shows that the patentee distinguished that term from prior art on the bases of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention." CCS Fitness, 288 F.3d at 1366-67.

Finally, the plaintiff has argued that there is nothing in the patent, or prosecution history, which limits the term board to "board cut from a log" or "solid all wood." However, this construction is completely supported by the specification which speaks to one of the benefits of the patent as "yield[ing] a superior product when cut from a log, reducing the amount of scrap in the outermost boards cut from a log." '831 patent, col. 2, 11. 22-24. Furthermore, figure 4 depicts the "transverse sectional view of a log, [which shows] the relationship to the outer surface of the log of several outer boards to be cut from it...." Id. at col. 2, 11. 55-57; Fig. 4. While this court is aware that it cannot import embodiments from the specification into the claims, it is clear that the patent's scope is limited to wood boards cut from logs. "[W]hen the 'preferred embodiment' is described as the invention itself, the claims are not entitled to a broader scope than that embodiment." SciMed Life Sys., 242 F.3d at 1341 (quoting Wang Labs., 197 F.3d at 1383). Therefore based on the intrinsic evidence presented, the court construes the term "board" to mean piece of elongated construction material made from wood cut from a log.

2. Manufactured to Have

The second term the parties seek the court to construe is "manufactured to have." Claim 1 of the

patent is exemplary of the use of this term. It reads in part "[the board's] top surface being manufactured to have a slightly rounded or curved configuration...." '831 patent, col. 4, 11. 22-24. The defendants argue that the term "manufactured to have" means "deliberately form the specific top surface by woodworking techniques."[3] The plaintiff argues that the term "manufactured to have" should be given its ordinary meaning, specifically, "made by a manufacturing process to have "

Based on the principles of claim construction detailed above, the court initially gives the term "manufactured to have" its ordinary meaning. The court then looks to the specification and prosecution history to see if the plaintiff has exhibited an intent to deviate from the ordinary meaning. In the specification, the plaintiff states that "the advantages of the invention are achieved by shaping at least the top surface of a board through cutting or milling and the like." '831 patent, col. 2, 11. 25-27. At the hearing the defendants argued that "cutting or milling and the like" describe woodworking techniques, and as such, the term "manufactured to have" is limited to those processes. The plaintiff disagrees with this assessment, arguing that "cutting or milling and the like" are exemplary manufacturing methods, and there is no intrinsic evidence that would overcome the heavy presumption that the term "manufactured to have" should be given anything other than its common, ordinary meaning.

"It is well established that the preferred embodiment does not limit broader claims that are supported by the written description." Toro, 199 F.3d at 1301 (citing Laitram Corp. v. Cambridge Wire Cloth Co.,

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[3] Again, the defendants initially argued that the definition should be "made by the manufacturing process of cutting or milling;" however, at the Markman hearing, the defendants changed their proposed definition.

863 F.2d 855, 868 (Fed. Cir. 1988)); see also Electro Med. Sys. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1054 (Fed. Cir. 1994) ("[A]lthough the specifications may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments."). In this case, the claim language does not specify the type of manufacturing process to be used. While, the specification does mention "cutting or milling and the like," the phrase "and the like" indicates that the patentee is merely giving an example of the preferred embodiment of the manufacturing process he envisions. However, when this language is taken in combination with the court's construction of the term "board," the scope of the manufacturing process must be redefined. The manufacturing processes must be those that are utilized for wood.

This construction is further supported by the prosecution history. The patent's original claims were rejected by the PTO "as being anticipated by the scientific principle that a board will warp in the direction of the grain." March 30, 1993 Office Action, p. 2. In response to this rejection, the plaintiff added the language "manufactured to have" to distinguish his board from boards that naturally warp. Specifically, the plaintiff wrote

> [T]he claims have been amended to specify that applicant's boards are manufactured to have the convex curvature. This would eliminate application of the scientific principle stated by the Examiner, even for those boards that do warp so that a convex top surface results.

September 30, 1993 Amendment, p. 4. The only type of boards that will warp in the direction of the grain are wood boards. Thus, by adding the language "manufactured to have" the plaintiff was clearly addressing wood boards. As such, the manufacturing process intended by the plaintiff was a woodworking technique, such as cutting or milling.

Therefore, based on the intrinsic evidence available, the court will limit the term "manufactured to have" as a manufacturing process utilizing woodworking techniques.

3. Convex Top Surface

The final term the parties seek to be construed is "convex top surface." The defendants argue that the term "convex top surface" means "a smooth curve having a radius of curvature and no flats, plateaus, or valleys and further, the ratio of that radius of curvature to width of the board must be in the range of about 4:1 to 6:1." The plaintiff argues that the term "convex top surface" should be given its ordinary meaning, "an upper surface with an outward curve." Again, the court turns to the intrinsic evidence to construe this term.

The disputed term appears in claim 1[4] as "a convex top surface which sheds water and at the same time is comfortable to walk on...." '831 patent, col. 4, 11. 25-26. The plaintiff argues that the express language of claim 1 simply requires that the curved configuration extend from the longitudinal center line downwardly toward each side edge. The plaintiff states that the inventor has done nothing to indicate a deviation from this express language. As with the other terms to be

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[4] The term also appears in independent claims 16 and 18.

construed, the court initially gives the term its ordinary meaning as derived from the scope of the claim. The court then looks to the specification and prosecution history to determine if the inventor displayed an intent to deviate from that ordinary meaning.

In this instance, the specification does not contain any indication that the term convex top surface is to be assigned a specific range of curvature. However, the defendants point out that during the prosecution of this patent, the plaintiff was forced to limit this curvature in order to overcome the Zagelmeyer prior art. For example, in his initial amendment to the PTO, the plaintiff distinguished the prior art by stating that

> although this board teaches the concept of providing a convex upper surface on a board intended to be walked upon, it does not suggest the particular radius of curvature, or relationship of radius of curvature to width of the board so that it will shed water and at the same time will not produce a tactile sensation of curvature or unevenness when it is walked or stood upon.

March 19, 1993 Preliminary Amendment, p. 2. This amendment language shows that in order to get around the Zagelmayer prior art, the plaintiff limited his patent to a particular radius of curvature. This radius of curvature was not focused on a particular claim, but on all the claims with a convex top surface. Furthermore, in his supplemental amendment following another rejection by the PTO and a protest by an interested party, the plaintiff wrote the following:

> Applicant then began trying different radiuses of curvature, but some were too

> shallow and when the board dried it tended not to shed water. Others had too short a radius of curvature and a distinct sensation of an uneven surface. Eventually, by trying a variety of curvatures, applicant discovered that a ratio of curvature to width of the board of about 5:1 produced the desired result, i.e., it shed water and did not produce an uneven sensation to someone standing on it.... It should be noted, however, that the ratio of the radius of curvature of a board to its width can vary within certain relatively narrow limits, e.g., from about 4:1 to about 6:1 and still meet the basic objects of the invention, although the preferred ration is about 5:1. Anything much outside this range does not provide satisfactory performance and/or is not acceptable to the consumer.

September 7, 1994 Supplemental Amendment, pp. 2-3.

In the plaintiffs attempt to claim around the Zagelmeyer prior art, he articulated the specific radius of curvature of the boards as a range from about 4:1 to 6:1. By further stating that "anything much outside this range ... is not acceptable," the plaintiff limited his patent to this range. The plaintiffs argument that this range was only exemplary or was only intended to apply to claim 18 is inconsistent with the prosecution history. Therefore, the court will adopt the defendants' proposed definition of convex top surface with respect to the radius of curvature.

However, the defendants' construction that the curve must be "free of flats, plateaus, valleys, or other breaks" is incorrect. Nowhere in the claim, specification, or prosecution history are these terms used, or even

implied, and this court declines to adopt it in construing this term. Therefore, the court construes the term "convex top surface" to mean "an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between about 4:1 to 6:1."

III. Conclusion

For the reasons stated above, the court has construed the claims in the following manner: the term "Board" means a piece of elongated construction material made from wood cut from a log; the term "Manufactured to have" means a manufacturing process utilizing woodworking techniques; and the term "Convex top surface" means an upper surface with an outward curve that has a ratio of its radius of curvature to width of the board between about 4:1 to 6:1.

The Clerk is **REQUESTED** to send a copy of this Order and Opinion to counsel of record.

It is so **ORDERED.**

/s/
UNITED STATES
DISTRICT JUDGE

Norfolk, Virginia
August 19, 2002

United States Court of Appeals for the Federal Circuit

ORDER

[ENTERED: November 1, 2005]

A combined petition for panel rehearing and for rehearing en bane having been filed by the APPELLANT, and the petition for rehearing having been referred to the panel that heard the appeal, and thereafter the petition for rehearing en bane having been referred to the circuit judges who are in regular active service,

UPON CONSIDERATION THEREOF, it is

ORDERED that the petition for panel rehearing be, and the same hereby is, DENIED and it is further

ORDERED that the petition for rehearing en banc be, and the same hereby is, DENIED.

The mandate of the court will issue on November 8, 2005.

FOR THE COURT,
/s/
Jan Horbaly
Clerk

Dated: November 1, 2005

Cc: Joseph S. Presta
Patrick J. Coyne

NYSTROM V TREX COMPANY, 03-1092
(DCT – 01-CV-905)
Note: Pursuant to Fed. Cir. R. 47.6, this order is not citable as precedent. It is a public record.

United States Court of Appeals for the Federal Circuit

03-1092

RON NYSTROM,

Plaintiff-Appellant,

v.

TREX COMPANY, INC. and TREX COMPANY, LLC,

Defendants-Appellees.

Before MAYER,* GAJARSA, and LINN, Circuit Judges.

[ENTERED: September 14, 2005]

ORDER

A combined petition for panel rehearing and rehearing en banc was filed by Trex Co., Inc. and Trex Co., LLC. A response thereto was invited by the court and filed by Ron Nystrom. Thereafter, these filings were referred to the merits panel that heard the appeal.

Upon consideration thereof,

IT IS ORDERED THAT:

(1) the petition for panel rehearing is granted for the limited purpose of addressing the effects of Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and

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* Haldane Robert Mayer vacated the position of Chief Judge on December 24, 2004.

(2) the previous opinion of the court in this appeal, issued on June 28, 2004 and reported at 374 F.3d 1105, is withdrawn. The new opinion accompanies this order.

FOR THE COURT

SEP 14 2005
Date

/s/
Jan Horbaly
Clerk

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division

RON NYSTROM,

Plaintiff/Counterclaim-Defendant,

v.

TREX COMPANY, INC. and
TREX COMPANY, LLC,

Defendants/Counterclaim-Plaintiffs.

AMENDED JUDGMENT IN A CIVIL CASE

CASE NUMBER: 2:01cv905

[ENTERED: October 25, 2002]

[**X**] **Decision by Court.** This action came for decision before the Court. The issues have been considered and a decision has been rendered by the Court.

IT IS ORDERED AND ADJUDGED that, as to plaintiff's complaint for patent infringement and defendant's declaratory judgment counterclaim for non-infringement, the court ENTERS judgment of non-infringement against plaintiff and in favor of defendants. It is further ORDERED AND ADJUDGED that, as to defendants' declaratory judgment counterclaim for invalidity, the court ENTERS judgment of invalidity as to claims 18, 19, and 20 in favor of the defendants.

Further, it is ORDERED AND DECREED that the remainder of defendants' declaratory judgment counterclaim is hereby DISMISSED, without prejudice.

Defendants will be allowed to assert all said counterclaims in their current form in the event this matter is remanded for further consideration and the counterclaims may be reinstated in their current form in the event the U.S. Court of Appeals for the Federal Circuit reverses or remands this case back to this court, subject to the provisions of the Federal Rules of Civil Procedure relating to the further amendment of pleadings and otherwise without prejudice to the rights of the parties.

Date: October 20, 2003. nunc pro tunc October 25, 2002

ELIZABETH H. PARET, CLERK

By: /s/
Lori M. Baxter, Deputy Clerk

(2)

05-950

Supreme Court, U.S.
FILED
MAR 2 - 2006
OFFICE OF THE CLERK

No. ~~05-456~~

IN THE

Supreme Court of the United States

RON NYSTROM,

Petitioner,

v.

TREX COMPANY, INC.
and TREX COMPANY, LLC,

Respondents.

On Petition for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

RESPONDENTS' BRIEF IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI

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March 2, 2006

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RULES

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I. PRELIMINARY STATEMENT

Respondent Trex Company, Inc., and Trex Company, LLC (collectively "Trex"), respectfully file this Opposition to Petitioner, Ron Nystrom's ("Nystrom") Petition for Writ of Certiorari. The Petition argues that this case squarely presents the question whether underlying factual findings, if any, allegedly made by a district court in construing the claims, should be given deference on appeal. Petitioner, Nystrom, also argues in both his second and third Proposed Questions that the Federal Circuit's *en banc* holding in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005), conflicts with this Court's precedent. Petitioners in *Phillips* filed a petition for a writ of certiorari, which was denied by this Court on February 20, 2006. None of Nystrom's Questions Presented are appropriate for review by this Court.

The fundamental premise of Nystrom's petition is mistaken. While the first Question identified by Nystrom — that the Federal Circuit's *de novo* review of district court claim construction orders is in conflict with Fed. R. Civ. P. 52(a) and Supreme Court precedent — may or may not have properly been raised in the *Phillips* certiorari petition, it is clearly not raised in this petition. Nystrom's assertion at page 19 of his petition that the Federal Circuit should have given deference to what Nystrom asserts were the district court's factual findings in this case, would result in precisely the same outcome. The district court held that the claims are limited to a board "made from wood cut from a log." The district court and Federal Circuit are in absolute agreement on this point. Thus, reviewing the Federal Circuit's decision — and restoring the district court's alleged factual findings — will result in precisely the same outcome.

Nor was this issue raised below by Petitioner or decided by the Federal Circuit below. In fact, Petitioner insisted in his opening brief at the Federal Circuit that claim construction is a question of law and that no deference should be given to the district court's claim construction. For this reason alone, the Petition should be denied.

The district court's claim construction in this case does not depend on the resolution of any factual issues. Petitioner cannot, and does not, cite to any factual findings by the district court. There are none. The Federal Circuit affirmed the district court's claim construction holding as a matter of law. Even had the Federal Circuit deferred to the district court's decision, it would, nonetheless, have affirmed. Even were this Court to grant certiorari on this Question — and Respondent respectfully submits that it should not — it would have no impact on the outcome of this case.

With respect to the second and third Questions Presented, Nystrom attacks the Federal Circuit's *en banc* decision in *Phillips*. This case is not the appropriate vehicle to review the *Phillips* decision; *Phillips* itself is. This Court, however, recently declined to review the *Phillips* decision and with good reason. The methodology set forth in *Phillips* is well within this Court's guidance in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996), and this Court's other claim construction decisions. *Phillips* merely cut back on certain Federal Circuit decisions — such as the Federal Circuit panel's initial June 28, 2004 decision in this case — that has now been vacated, that allowed heavy reliance on extrinsic evidence, such as dictionaries, to broaden the ordinary meaning of a claim term beyond how it would be understood by persons of ordinary skill in the art in the context of the intrinsic evidence. The Federal Circuit did

not, as Nystrom contends, limit Nystrom to his preferred embodiment but, rather, reasonably interpreted the claim language at issue in this case in view of the specification and prosecution history as this Court expressly directed in *Markman*.

Respondent, Trex, respectfully requests that the petition be denied.

II. FACTUAL BACKGROUND

A. The District Court Proceedings

The patent in suit is directed to wood flooring: specifically, boards for use in constructing an exterior floor, such as a deck. *Nystrom v. Trex Co., Inc.*, 424 F.3d 1136, 1139 (Fed. Cir. 2005) (App. 2A.) The invention described and claimed in the Nystrom patent is an exterior wood flooring board shaped to shed water from its upper surface while at the same time providing a surface on which it is comfortable to walk and stand. (App. 3A.) Independent Claim 1 is expressly directed to "[a] board for use in constructing a flooring surface for exterior use...". (App. 4A.) The invention is useful because, in allowing water to drain from the curved top surfaces of the wooden boards, it prevents them from rotting. This is not a problem that affects Trex's composite product.

The primary issue in this case is the definition of the term "board." The term "board" appears in each claim. Both the district court and the Federal Circuit construed "board" in the context of the specification and prosecution history which disclose only wood boards cut from a log that are formed using wood working techniques. (App. 12A-16A, 81A-83A.) Contrary to Petitioner's arguments, the

district court did not resolve any disputed factual issues in reaching this construction. The parties did not present any conflicting testimony or documentary evidence on this issue. Rather, they submitted the specification and prosecution history. Nonetheless, Nystrom states that "the district court made implicit and explicit factual findings that the ordinary and customary meaning of 'board' was not limited to wood cut from a log." (Petition at 5.) Yet, Nystrom never identifies what these illusory, alleged factual findings are. Nystrom cites portions of the district court's order repeating statements from Nystrom's specification and prosecution history (App. 81A), yet, these are not factual findings. Indeed, the district court made no factual findings in its claim construction order. (*See* App. 80A-83A.)

Instead, the district court relied only on the claims, the specification, and the prosecution history. After considering the claim language, the district court reviewed the specification and prosecution history of the patent and determined what one of ordinary skill in the art would consider the term "board" to mean, in the context of the specification and prosecution history (App. 81A-83A). The district court then held that, "based on the intrinsic evidence[1] presented, the court construes the term 'board' to mean [a] piece of elongated construction material made from wood cut from a log." (App. 83A.) The court did not rely on any extrinsic evidence.[2] In view of the context that the board

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[1] "Intrinsic evidence" refers to the patent, specification, and prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

[2] "Extrinsic evidence" refers to evidence pertaining to claim construction that is outside of the patent documents, such as expert testimony, inventor testimony, or documentation such as dictionaries, treatises, or other patents. *Vitronics*, 90 F.3d at 1584.

was made from wood, the court construed the term "manufactured to have" to mean "a manufacturing process utilizing woodworking techniques." (App. 86A.)

Trex's accused products, however, are not made from wood, cut from a log, or made using woodworking techniques. They are composite engineered materials, made from a mixture of cellulose fibers and plastic that is mixed in certain proportions, heated, and extruded into the desired shape. In view of the district court's construction, Nystrom recognized that he could not prove infringement and both parties moved for summary judgment of non-infringement. (App. 69A-70A.) The district court entered a judgment of non-infringement against Nystrom.

B. Federal Circuit's Decisions

On appeal, Nystrom argued that the ordinary meaning of the term "board" is not limited to a wood board, and that the specification and prosecution history did not clearly disavow such broader meaning.

In its initial opinion (which was withdrawn on September 14, 2005), the Federal Circuit panel majority held that the ordinary meaning of the term "board" was not limited to wood, based on a dictionary definition that Nystrom had submitted to the Federal Circuit. (App. 40A.) The panel in that withdrawn decision held that Nystrom did not disavow or disclaim materials other than wood. The initial panel decision relied heavily on the Federal Circuit's decision in *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), stressing the use of the dictionary to give the term the broadest possible meaning and looking to specification and prosecution history only to

see if there was a clear disavowal or express disclaimer sufficient to rebut this "ordinary meaning."[3]

Before the mandate issued, the Federal Circuit granted *en banc* consideration in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Trex then filed a petition for panel rehearing and rehearing *en banc* of the panel's decision in this case. The Federal Circuit issued its *en banc* decision in *Phillips* on July 12, 2005. On September 14, 2005, the panel in this case granted Trex's petition for rehearing, withdrew its initial opinion, and entered a new opinion consistent with the Court's holding in *Phillips*.

In its September 14, 2005 opinion, the now unanimous panel corrected the legal mistakes in its initial decision in view of the Court's *en banc* decision in *Phillips*. The panel held that: "[a]n examination of the term 'board' in the context of the written description and prosecution history of the '831 patent leads to the conclusion that the term 'board' must be limited to wood cut from a log" (App. 12A); and that "as explained in *Phillips*, Nystrom is not entitled to a claim construction divorced from the context of the written description and prosecution history" (App. 14A). The Federal Circuit held that, in light of *Phillips*, claim construction should not start with dictionary definitions to determine an ordinary meaning divorced from the context of the intrinsic evidence (as the panel had done in its initial decision), and modify that meaning only when there a clear

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[3] In a vigorous dissent (not included in the Appendix by Petitioner) from the majority's construction of the terms "board" and "manufactured to have," Judge Gajarsa criticized the majority's use of a dictionary to define an ordinary meaning, and urged that the specification and prosecution limit the definition of these terms. 374 F.3d 1105, 1120-21 (Fed. Cir. 2004) (Gajarsa, J., dissenting).

disclaimer based on the specification and/or prosecution history. (App. 15A.) The panel affirmed the district court's construction of board to mean a "piece of elongated construction material made from wood cut from a log." (App. 16A, 9A.)

Nystrom argues at page 19 of his petition that the district court made some factual finding that the Federal Circuit somehow failed to give deference to. Nystrom fails, however, to identify this alleged factual finding. The district court made no fact findings, therefore there are no factual findings that the panel could have deferred to.

C. Nystrom's Petition for Panel Rehearing and Rehearing *En Banc*, and Motion to Stay Mandate

At no time prior to the Federal Circuit panel's September 14, 2005 decision did Petitioner argue that the Federal Circuit should defer to any factual finding of the district court. Quite to the contrary. Petitioner specifically asserted in its opening appellate brief that "[c]laim construction is a question of law that this Court reviews de novo" and that therefore "No deference is given to the district court's construction." (Nystrom Opening Brief at 17.) In fact, Nystrom framed the issues for appeal as whether there was an "error of law" in limiting the term "board" to be wood cut from a log. (Nystrom Opening Brief at 2.)

The first time Petitioner questioned the Federal Circuit's practice of reviewing claim construction orders *de novo* was in its Petition for Panel Rehearing and Rehearing En Banc, after the Federal Circuit panel's September 14, 2005 decision. The Federal Circuit denied that petition